



# The Commonwealth of Massachusetts

## AUDITOR OF THE COMMONWEALTH

ONE ASHBURTON PLACE, ROOM 1819  
BOSTON, MASSACHUSETTS 02108

A. JOSEPH DeNUCCI  
AUDITOR

TEL. (617) 727-6200

NO. 2009-8018-14C

INDEPENDENT STATE AUDITOR'S REPORT  
ON MASSHEALTH'S  
ADMINISTRATION OF DENTAL CLAIMS  
JULY 1, 2005 TO MAY 22, 2009

**OFFICIAL AUDIT  
REPORT  
NOVEMBER 16, 2010**

---

**TABLE OF CONTENTS/EXECUTIVE SUMMARY**

---

**INTRODUCTION****1**

MassHealth, within the Massachusetts Executive Office of Health and Human Services (EOHHS), administers the state's Medicaid program, which provides access to healthcare services, including dental services, to approximately one million eligible low- and moderate-income individuals, couples, and families. In fiscal year 2009, the Massachusetts Medicaid program paid in excess of \$6.8 billion on 66 million claims to health care providers, of which approximately 50%<sup>1</sup> was federally funded. Medicaid expenditures represent approximately 25% of the Commonwealth's total annual budget.

The goals of MassHealth's Dental Program are to improve member access to quality dental care; improve oral health and wellness for MassHealth members; increase provider participation in the Dental Program network; streamline program administration to make it easier for providers to participate; and create a partnership between MassHealth and the dental community. MassHealth has approved over 5,000 dentists as participating providers in the Dental Program and according to MassHealth officials, as of June 2010, there were approximately 2,000 dentists who were actively participating in the program. In fiscal year 2009, MassHealth paid 4,668,657 dental claims totaling \$300,961,788, or an average of 12,790 claims and \$824,552 in payments daily.

During the period covered by our audit, EOHHS awarded a contract to Dental Services of Massachusetts, Inc., (DSM) to administer the Dental Program. Initially, this contract had a three-year term of August 1, 2006 to July 31, 2009, but both parties have since agreed to extend the service contract through June 30, 2010. DSM performs its contractual responsibilities through a subcontractor currently known as DentaQuest, LLC (DentaQuest).<sup>2</sup> Under the contract, DentaQuest has both programmatic and administrative responsibilities, including (a) dental provider network administration services, (b) customer services, (c) claims administration and processing, (d) contract administration and reporting, and (e) quality improvement/utilization management. MassHealth's administrative responsibilities under the contract include reviewing DentaQuest's performance to verify compliance with the terms of the contract and any applicable laws, rules, and regulations.

Our audit was conducted in accordance with applicable generally accepted government auditing standards. Our objectives were to determine (1) whether dental claims filed by the participating dental providers in our sample were properly supported by required documentation; services were delivered; and claims were complete, accurate, and in compliance with applicable laws, rules, and regulations; and (2) the extent and effectiveness of MassHealth's internal controls over and oversight of its dental providers.

Our audit was part of the Office of the State Auditor's (OSA) ongoing independent statutory oversight of the Massachusetts Medicaid program. The heightened concern over the program's integrity was evidenced in January 2003, when the U.S. Government Accountability Office (GAO) placed the U.S. Medicaid Program on its list of government

---

<sup>1</sup> Under the American Recovery and Reinvestment Act, Massachusetts's Federal Matching Assistance Percentage was temporality increased to 58.78% for fiscal year 2009 and 61.59% during fiscal year 2010.

<sup>2</sup> At the time EOHHS awarded the contract, DentaQuest was known as Doral Dental USA, LLC. On December 1, 2009, Doral Dental USA, LLC changed its name to DentaQuest, LLC.

programs that are at “high risk” of fraud, waste, abuse, or mismanagement. GAO has estimated that between 3% and 10% of total healthcare costs are lost to fraudulent or abusive practices by unscrupulous healthcare providers. Further, several previously issued OSA audit reports have disclosed significant weaknesses in MassHealth’s ability and efforts to detect fraud, waste, abuse, or mismanagement in the Massachusetts Medicaid program.

Our audit identified that deficiencies in the Dental Program’s claims processing system has resulted in millions of dollars in ineligible claims and, in some cases, potentially fraudulent claims being paid by MassHealth.

---

## AUDIT RESULTS

7

### **1. MASSHEALTH HAS NOT ADEQUATELY CONTROLLED DENTAL RADIOGRAPH (X-RAY) SERVICES PERFORMED BY PROVIDERS, WHICH RESULTED IN COMMONWEALTH OVERCHARGES TOTALING AS MUCH AS \$5,206,017, INCLUDING POTENTIALLY FRAUDULENT BILLINGS FOR SERVICES NEVER PROVIDED, AND ITS MEMBERS RECEIVING UNNECESSARY SERVICES INVOLVING RADIATION EXPOSURE**

7

Our audit found that MassHealth had not developed adequate internal controls over the use of dental radiographs (X-rays) performed by providers in its Dental Program. Specifically, MassHealth regulations state that the program will pay only for medically necessary dental radiographs taken as an integral part of diagnosis and treatment planning, with the intent of confining radiation exposure of members to the minimum necessary to achieve satisfactory diagnosis. However, we found that the 10 providers we visited had taken dental radiographs totaling at least \$5,206,017 on members that violated these regulations. Specifically, radiographs were taken for unallowable purposes, appeared to be unnecessary to achieve a satisfactory diagnosis, and conflicted with recommendations made by the U.S. Food and Drug Administration (FDA) on the proper use of dental radiographs. We also found that one of the providers we visited routinely billed and received payments from MassHealth for radiographic services that he had not performed for members. These unallowable, unnecessary, and potentially fraudulent payments occurred because DentaQuest and MassHealth had not collaborated to develop effective internal controls over these expenses, including developing edits within the Dental Program’s claims processing system to detect and deny such unallowable claims.

### **2. MASSHEALTH HAS NOT ADEQUATELY CONTROLLED ORTHODONTIC SERVICES, WHICH RESULTED IN COMMONWEALTH OVERCHARGES TOTALING AS MUCH AS \$321,553 AT ONE PROVIDER, INCLUDING POTENTIALLY FRAUDULENT CHARGES FOR SERVICES NOT PERFORMED**

29

MassHealth has established regulations governing orthodontic services for the Dental Program under 130 Code of Massachusetts Regulations (CMR) 420.423 and 420.431 that provide service descriptions and limitations for all covered orthodontic services. However, our audit found that MassHealth has not established adequate controls to ensure that dental providers submit claims for pre-orthodontic treatment visits and oral/facial photographic images in accordance with these regulations. Moreover, we found that DentaQuest’s claims processing system does not contain adequate edits to identify and reject unallowable claims for orthodontic services. Consequently, we found

that one orthodontist we visited, John P. Burke DMD, received payments for pre-orthodontic treatment visits and oral/facial photographic images that exceeded the amounts allowable under state regulations by as much as \$321,553 during the audit period. We also found a number of instances in which this provider billed and received payments from MassHealth for dental services that he did not perform.

---

**3. DENTAQUEST'S FAILURE TO PROPERLY ADJUST BILLINGS FROM DENTAL PROVIDERS RESULTED IN UNNECESSARY DENTAL PROGRAM COSTS TOTALING AT LEAST \$162,863** **34**

---

MassHealth's dental providers frequently take multiple bitewing, periapical, and panoramic radiographs on members during routine dental check-ups. Depending upon the type and number of radiographs taken, MassHealth regulations require that these individual radiographs be bundled together and billed by dental providers as one full-mouth series radiograph rather than as individual radiographs. By bundling these radiographs, the Commonwealth's reimbursement to dental providers is approximately 40% less for these services than it would be if it allowed dental providers to bill for these radiographs separately. However, we found that the Dental Program's claims processing system lacked sufficient edits to ensure that radiographs were appropriately bundled prior to payment. Consequently, we found that one dental provider, Kool Smiles, which had offices in Cambridge, Chelsea, and New Bedford that were included in our sample, regularly submitted and was paid for separate claims for bitewing, periapical, and panoramic radiographs, which instead should have been bundled and billed to MassHealth as one full-mouth radiograph. This resulted in unnecessary costs to the Commonwealth for these radiographs totaling \$162,863 during fiscal year 2009 at these three locations alone.

**4. DUPLICATE PAYMENTS TOTALING AT LEAST \$2,694 MADE TO DENTAL PROVIDERS** **38**

---

Our review of 258 member files at the 10 dental providers we audited identified 11 instances totaling \$2,694 in which a dental provider in our sample was paid twice for the same dental procedure. In each case, two claims were found in MassHealth's records, indicating that the same dental procedures were performed on the same member either on the same day or within a few days' time. However, MassHealth's dental claims processing system failed to identify these as duplicate claims.

---

**APPENDIX** **42**

---

**U.S. Food and Drug Administration Guidelines, "The Selection of Patients for Dental Radiographic Examinations"**

## INTRODUCTION

### *Background*

MassHealth, within the Massachusetts Executive Office of Health and Human Services (EOHHS), administers the state's Medicaid program, which provides access to healthcare services, including dental services, to approximately one million eligible low- and moderate-income individuals, couples, and families. In fiscal year 2009, the Massachusetts Medicaid program paid in excess of \$6.8 billion on 66 million claims to health care providers, of which approximately 50%<sup>3</sup> was federally funded. Medicaid expenditures represent approximately 25% of the Commonwealth's total annual budget.

The goals of MassHealth's Dental Program are to improve member access to quality dental care; improve oral health and wellness for members; increase provider participation in the Dental Program network; streamline program administration to make it easier for providers to participate; and to create a partnership between MassHealth and the dental community. All dental providers participating in the Dental Program must comply with MassHealth regulations including 130 Code of Massachusetts Regulations (CMR) 420 and 450. In addition, Dental Program staff has the authority to determine which dentists or dental providers the program will accept or continue to use in the program. Potential providers must submit an application to participate in the program to MassHealth for its review and approval. Upon receipt of an application from a potential new provider, Dental Program staff verifies that the applicant has current licenses and liability insurance coverage and reviews the applicant's history of any state licensing and Medicaid sanctions or reprimands as well as the applicant's malpractice claims history. Following successful verification that an applicant is in good standing in all of these areas, Dental Program staff can enroll the provider in the Dental Program.

The Dental Program currently has over 5,000 dentists enrolled as providers and according to MassHealth officials, as of June 2010; there were approximately 2000 dentists who were actively participating in the program. During fiscal year 2009, MassHealth paid 4,668,657 dental claims totaling \$300,961,788, or an average of 12,790 claims and \$824,552 in payments daily. The dental services covered under the Dental Program vary depending upon a member's age (e.g., covered services are more extensive for members under age 21 than for members aged 21 and older). For

---

<sup>3</sup> Under the American Recovery and Reinvestment Act, Massachusetts's Federal Matching Assistance Percentage was temporality increased to 58.78% for fiscal year 2009 and 61.59% during fiscal year 2010.

example, all members are eligible to receive: oral exams, radiographs (X-rays), cleanings, and fillings, whereas only those members under age 21 are eligible to receive services such as fluoride treatments, sealants, braces, and space maintainers.

### ***Growth in Dental Program***

The Dental Program has seen significant growth over the past four fiscal years. Specifically, the number of claims paid by MassHealth has increased from 2,368,672 to 4,668,657 (97%), while payments to dental providers have increased from \$116,047,124 to \$300,961,788 (159%) during this period of time, as detailed in the table below.

<u>Fiscal Year</u>	<u>Paid Claims</u>	<u>Percent Increase</u>	<u>Payments</u>	<u>Percent Increase</u>
2006	2,368,672		\$116,047,124	
2007	3,590,854	52%	\$203,484,863	75%
2008	3,901,495	65%	\$237,467,781	104%
2009	4,668,657	97%	\$300,961,788	159%

Over the same time period, the number of members that received services under the Dental Program significantly increased as well. Specifically, members under the age of 21 increased from 258,048 to 363,219 (41%), while members over the age of 21 that received services increased from 99,698 to 310,837 (211%). The table below details the growth in member participation in the Dental Program over the past four fiscal years.

### **Members Receiving Dental Services**

<u>Fiscal Year</u>	<u>Under Age 21</u>		<u>Over Age 21</u>	
	<u>Members Served</u>	<u>Percent Increase</u>	<u>Members Served</u>	<u>Percent Increase</u>
2006	258,048		99,698	
2007	283,995	10%	248,153	149%
2008	321,979	25%	265,139	166%
2009	363,219	41%	310,837	211%

### ***Civil Lawsuit Causes Growth in Dental Program***

The growth within the Dental Program resulted, in part, from a civil suit filed by MassHealth members and Health Care For All, Inc.,<sup>4</sup> against several Commonwealth and MassHealth executives. The suit was filed in United States District Court, District of Massachusetts, under Civil Action No.

<sup>4</sup> Health Care For All, Inc. is a nonprofit, tax-exempt organization that represents the interests of Massachusetts residents who seek quality, affordable health care.

00-10833-RWZ dated April 28, 2000. According to the plaintiffs, the Commonwealth and MassHealth had fallen far short of meeting statutory and assumed obligations to serve the dental needs of children and adult enrollees. On July 14, 2005, the court issued a Memorandum of Decision on the case, which concluded and ordered the following:

*Plaintiffs have demonstrated that defendants violated sections of the Medicaid Act that require prompt provision of services, adequate notice and treatment at reasonable intervals and that these violations resulted, in part, from insufficient reimbursement. Defendants agreed at the outset of the trial to be bound as to the entire "class" of MassHealth enrollees under the age of 21 who qualify for dental services. The Court has not found any violations by defendants with respect to adult enrollees with special circumstances. The parties shall attempt to develop a joint remedial program and judgment and report to the Court thereon by August 31, 2005.*

On February 3, 2006, the court issued its judgment on this case, which required the plaintiffs to make certain administrative, programmatic, fiscal, and regulatory changes to the Dental Program in order to ensure compliance with applicable federal Medicaid laws. Provided below are examples of the court-ordered changes that directly impacted the recent growth within the Dental Program.

*Defendants understand that to comply with this judgment, they must develop and maintain a network of dental providers that is of sufficient size and scope to provide access to medically necessary dental services for children....*

*As part of the MassHealth dental program, defendants shall offer member assistance/intervention services designed to assist the Children in making and keeping dental appointments, obtaining transportation in accordance with applicable regulations to and from appointments, and follow-up with members and providers about appointments.*

*Defendants shall complete the evaluation process for the Third-Party Administrator (TPA) procurement, issued pursuant to a legislative directive under Chapter 149, Section 309 of the Acts of 2004, and submit the required cost benefit report to the House and Senate Ways and Means Committees by January 15, 2006. EOHHS' State fiscal year 2007 House One budget request shall include funds sufficient to account for the costs associated with retaining a TPA to administer the MassHealth dental program. The terms of this Judgment are based upon a qualified TPA being approved and fully funded by the Massachusetts legislature....*

*Effective July 1, 2006, defendant shall increase MassHealth dental reimbursement for eligible members under age 21 by an estimated amount of at least \$13.74 million.*

*After state fiscal year 2007 and continuing thereafter for the term of this Judgment, defendants shall review and analyze MassHealth dental reimbursement rates for eligible members under age 21 on an annual basis, and assess based on then-existing circumstances whether any further adjustment is necessary to meet the dental needs of the Children....*

***Dental Third-Party Administrator Contract***

As a result of the court's judgment, MassHealth awarded a third-party administrator contract to Dental Services of Massachusetts, Inc., and (DSM). Initially, the contract had a three-year term of August 1, 2006 to July 31, 2009, but the parties have since agreed to extend the service contract through June 30, 2010. Although MassHealth awarded the contract to DSM, the contractor performs its contractual responsibilities through what it refers to as its "Significant Subcontractor" currently known as DentaQuest. Under the contract, DentaQuest has both programmatic and administrative responsibilities, including (a) dental provider network administration services, (b) customer services, (c) claims administration and processing, (d) contract administration and reporting, and (e) quality improvement/utilization management. MassHealth's administrative responsibilities under the contract include reviewing DentaQuest's performance to verify compliance with the terms of the contract and any applicable laws, rules, and regulations.

As previously noted, all dental providers participating in the Dental Program must comply with the requirements of 130 Code of Massachusetts Regulations 420 and 450. Also, MassHealth has developed a comprehensive Dental Program Office Reference Manual to help participating dental providers comply with these regulations. The manual addresses such matters as provider services, verification of member eligibility, prior authorization for treatment, claim submission procedures, patient records, clinical and radiology criteria, and orthodontia. As stated in the manual, "If there is a conflict between the Manual and the regulations, the regulations take precedence in every case."

***Audit Scope, Objectives, and Methodology***

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) conducted an audit of certain aspects of MassHealth's administration of dental claims during the period July 1, 2005 to May 22, 2009.<sup>5</sup> Our audit was conducted in accordance with applicable generally accepted government auditing standards. Our objectives were to determine (1) whether dental claims filed by the participating dental providers in our sample were properly supported by required documentation; services were delivered; and claims were complete, accurate, and in compliance with applicable laws, rules, and regulations; and (2) the extent and effectiveness of MassHealth's internal controls and oversight of its dental providers.

---

<sup>5</sup> Subsequent to May 22, 2009, MassHealth began maintaining its dental claims data in a new management information system. Because our audit work started prior to the implementation of this new system, we limited all of our data analysis to the period from July 1, 2005 through the date on which this new system was implemented.



To achieve our objectives, we first reviewed applicable state and federal laws, rules, and regulations, the MassHealth Dental Program Manual; a publication of the U.S. Food and Drug Administration (FDA) relative to dental radiograph guidelines titled “The Selection of Patients for Dental Radiographic Examinations;” and applicable dental provider billing policies and procedures. We then obtained and analyzed dental claims information contained in the Massachusetts Medicaid Management Information System (MMIS), MassHealth’s automated claims processing system used to pay dental providers. We analyzed this data to identify the (a) amount and number of paid claims per participating dental provider, (b) type and frequency of services performed by participating dental providers, and (c) service trends and billing anomalies indicative of systemic billing problems within the Dental Program. Based upon our analysis of this data, we judgmentally selected 10 dental provider locations across the Commonwealth for on-site reviews. These included an orthodontist and nine offices that practice general dentistry. We selected a judgmental sample of 258 files from members under the age of 21 for review. The paid dental claims associated with these members totaled \$495,627 during the audit period. We tested each member file to ensure that the paid claims were properly authorized and supported by appropriate documentation, including dental charts, radiographs, prior authorization requests, and related billing forms and records.

We consulted with MassHealth and DentaQuest officials during the conduct of our audit fieldwork and considered their comments when preparing our report. Also, at the conclusion of each field audit, we discussed the results with each of the 10 dental providers and also considered their comments when preparing this report.

Our audit was conducted as part of the OSA’s ongoing independent statutory oversight of the Commonwealth’s Medicaid Program. The heightened concern over the program’s integrity was evidenced in January 2003, when the U.S. Government Accountability Office (GAO) placed the U.S. Medicaid Program on its list of government programs that are at “high risk” of fraud, waste, abuse, or mismanagement. Further, GAO has estimated that between 3% and 10% of total healthcare costs are lost to fraudulent or abusive practices by unscrupulous healthcare providers. Also, several previously issued OSA audit reports have disclosed significant weaknesses in MassHealth’s ability and efforts to detect fraud in the Commonwealth’s Medicaid program. Our current audit was conducted to determine whether such weakness exists in the process MassHealth uses to process dental claims.

As indicated in the Audit Results section of this report, our audit identified that deficiencies in the Dental Program's claims processing system has resulted in millions of dollars in ineligible claims and, in some cases, potentially fraudulent claims being paid by MassHealth.

---

## AUDIT RESULTS

### 1. MASSHEALTH HAS NOT ADEQUATELY CONTROLLED DENTAL RADIOGRAPH (X-RAY) SERVICES PERFORMED BY PROVIDERS, WHICH RESULTED IN COMMONWEALTH OVERCHARGES TOTALING AS MUCH AS \$5,206,017, INCLUDING POTENTIALLY FRAUDULENT BILLINGS FOR SERVICES NEVER PROVIDED, AND ITS MEMBERS RECEIVING UNNECESSARY SERVICES INVOLVING RADIATION EXPOSURE

Our audit found that MassHealth had not developed adequate internal controls over the use of dental radiographs (X-rays) taken by providers in its Dental Program. Specifically, MassHealth regulations state that the program will pay only for medically necessary dental radiographs taken as an integral part of diagnosis and treatment planning with the intent of confining radiation exposure of members to the minimum necessary to achieve satisfactory diagnosis. However, we found that the 10 providers we visited had taken dental radiographs totaling at least \$5,206,017 that violated these regulations. Specifically, radiographs were taken for unallowable purposes; appeared to be unnecessary to achieve a satisfactory diagnosis; and conflicted with recommendations made by the U.S. Food and Drug Administration (FDA) on the proper use of dental radiographs. We also found that one of the providers we visited routinely billed and received payments from MassHealth for radiographic services that he did not perform. These unallowable, unnecessary, and potentially fraudulent payments occurred because DentaQuest, LLC (DentaQuest) and MassHealth had not collaborated to develop effective internal controls over these expenses, including developing edits within the Dental Program's claims processing system to detect and deny such unallowable claims.

As noted in the Background section of this report, DentaQuest is responsible for administering the Dental Program's member benefits and provider network in accordance with the terms and conditions of its contract with MassHealth as well as with all applicable laws, rules, and regulations. In this regard, the contract between MassHealth and DentaQuest requires that DentaQuest establish a MassHealth-approved process for ensuring that only medically necessary and covered dental services are paid for eligible members in accordance with 130 Code of Massachusetts Regulations (CMR) 420. In addition, one of the objectives of MassHealth's regulations is to confine a member's exposure to radiation from radiographs to the minimum necessary to achieve satisfactory diagnosis. Specifically, 130 CMR 420.423(A), states, in part:

*The MassHealth agency pays for radiographs/diagnostic imaging taken as an integral part of diagnosis and treatment planning. The intent is to confine radiation exposure of members to the minimum necessary to achieve satisfactory diagnosis.*

However, our audit found that the Dental Program's claims processing system did not include sufficient edits to detect and deny dental claims that violated MassHealth's regulations. Moreover, because MassHealth did not adequately monitor DentaQuest's performance under the contract, it did not identify this system deficiency.

As discussed below, our review of MassHealth's controls over radiographic services revealed (a) unallowable periapical radiographs totaling \$4,965,004, (b) unallowable and potentially fraudulent full-mouth and panoramic radiographs totaling at least \$195,440, (c) unnecessary bitewing radiographs totaling at least \$45,573, and (d) bitewing radiographs being prescribed contrary to federal guidelines.

**a. Periapical Radiographs Totaling as Much as \$4,965,004 Prescribed for Unallowable Purposes**

One type of radiograph that is reimbursable by MassHealth to dental providers is called a periapical radiograph, which shows the whole tooth from the crown to beyond the end of the root to where the tooth is anchored in the jaw. MassHealth regulations allow periapical radiographs to be taken by a dentist either as part of a periodic full-mouth examination of a member or, under certain circumstances, independently to monitor a specific problem. Periapical radiographs taken independently are used to detect any abnormalities of the root structure and surrounding bone structure. 130 CMR 420.423(3) details the specific conditions under which MassHealth will pay for periapical radiographs that are taken independent of a full-mouth examination, as follows:

*Periapical films may be taken for specific areas where extraction is anticipated when infection, periapical change, or an anomaly is suspected, or when otherwise directed by the MassHealth agency. A maximum of four periapical films is allowed per member per visit.*

During our audit, we conducted on-site audits at 10 dental provider locations across the Commonwealth. As part of these audits, we examined the total payments that these 10 providers received from MassHealth for independent periapical radiographs between July 1, 2005 and May 22, 2009. The objectives of our analysis in this area were to determine the extent to which the dental providers we audited were using independent periapical radiographs in a manner consistent with MassHealth regulations (i.e., to monitor specific problems). We also wanted to assess the adequacy of the controls or system edits that have

been implemented by DentaQuest in the Dental Program's claim processing system to ensure that only those claims for radiographs allowable under MassHealth's regulations are paid.

In total, for MassHealth members under the age of 21, the 10 providers we visited submitted 361,673<sup>6</sup> claims to DentaQuest for independent periapical radiographs during the audit period and received payments for these claims totaling \$5,905,057, as detailed below.

<u>Provider</u>	<u>Paid Claims</u>	<u>Amount</u>
Small Smiles Dental Clinic of Lawrence	34,365	\$ 566,797
Small Smiles Dental Clinic of Springfield	69,180	1,153,198
Small Smiles Dental Clinic of Worcester	70,137	1,162,799
Kool Smiles –Cambridge	24,167	394,626
Kool Smiles – Chelsea	11,359	193,947
Kool Smiles - New Bedford	35,090	586,818
Holyoke Mall Dental Health Center	12,818	207,284
Community Dentists	31,366	497,953
Randall L. Davis DMD	37,441	609,474
John P. Burke DMD	<u>35,750</u>	<u>532,161</u>
Total	<u>361,673</u>	<u>\$5,905,057</u>

Our analysis of these 361,673 claims found that, in the majority of these cases, dental providers did not take these periapical radiographs in accordance with 130 CMR 420.423(3) and that the Dental Program's claims processing system did not include adequate edits to identify and reject claims that violated this regulation. Specifically, using information in the Massachusetts Medicaid Management Information System (MMIS), we determined that only 56,884 (15.7%) of these 361,673 claims were related to dentists needing to monitor specific problems that resulted in extractions or were related to the palliative treatment of dental pain or infection as required by 130 CMR 420.423(3). The remaining 304,789 claims (84.3%) resulted from the 10 providers routinely taking independent periapical radiographs on members as part of their routine examinations.

In addition to analyzing the MMIS information relative to the total claims paid to these 10 providers for periapical radiographs, we also reviewed 258 member files at the 10 providers to determine whether the providers were routinely taking periapical radiographs on members

---

<sup>6</sup> During our audit period, the number of periapical radiographs actually taken by these dental providers was 366,734 and the related billings for these radiographs totaled \$5,995,853. However, the numbers presented in this table were reduced to omit any duplication of questioned amounts presented in other audit results in this report.

contrary to state regulations. Our review revealed that these 258 members received 3,307 independent periapical radiographs during the audit period. However, 199 (77%) of the 258 members did not require an extraction or receive any palliative treatment for pain or infection related to these periapical radiographs. Moreover, 66 (33%) of the 199 members had no dental problems (not even a single cavity) yet received a total of 1,436 independent periapical radiographs during the audit period.

The results of both our analysis of MMIS information and our review of specific member files clearly indicate that, in most cases, these 10 dental providers were not using independent periapical radiographs for problem-specific areas as required by 130 CMR 420.423(3). To illustrate this excessive use of periapical radiographs, the table below details the actual dental services provided to one sampled member, which is representative of many of the other cases we reviewed. Over a four-year period, this member received routine preventive dental care and did not require restorative or exodontist services. However, the dental provider took independent periapical radiographs on the member during every one of the member's dental check-ups, as indicated in the following table.

<u>Date of Service</u>	<u>Oral Exam</u>	<u>Bitewings</u>	<u>Periapicals</u>	<u>Prophylaxis</u>	<u>Sealants</u>	<u>Fluoride</u>
July 8, 2005	1	2	2	1	-	1
January 11, 2006	1	2	2	1	-	1
July 21, 2006	1	2	2	1	8	1
February 22, 2007	1	2	2	1	10	1
August 23, 2007	1	2	2	1	-	1
March 13, 2008	1	2	2	1	-	1
October 7, 2008	1	2	2	1	-	1
April 20, 2009	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	-	<u>1</u>
Total	<u>8</u>	<u>16</u>	<u>16</u>	<u>8</u>	<u>18</u>	<u>8</u>

By using independent periapical radiographs in this manner (i.e., taking them routinely rather than primarily limiting their use to those situations in which an anomaly is suspected), the 10 dental providers may have failed to confine radiation exposure of MassHealth members to the minimum necessary to achieve satisfactory diagnosis. Moreover, DentaQuest's failure to include edits within its claims processing system to detect this use of periapical radiographs enabled the inappropriate use of periapical radiographs by these providers. This raised the

cost of the Dental Program to the Commonwealth by as much as \$4,965,004 during the audit period at just the 10 providers we visited, as detailed in the following table:

### Unallowable Periapical Radiographs

July 1, 2005 to May 22, 2009

<u>Dental Providers</u>	<u>Periapicals</u>	<u>Extractions</u>	<u>Pain/Infection</u>	<u>Unallowable Periapicals</u>	<u>Unallowable Costs</u>
Small Smiles – Lawrence	34,365	4,770	162	29,433	\$ 485,381
Small Smiles – Springfield	69,180	11,604	1,344	56,232	938,426
Small Smiles – Worcester	70,137	9,027	2,180	58,930	977,690
Kool Smiles – Cambridge	24,167	2,499	376	21,292	347,329
Kool Smiles – Chelsea	11,359	2,437	135	8,787	149,752
Kool Smiles – New Bedford	35,090	5,309	359	29,422	491,594
Holyoke Mall Dental Health Center	12,818	5,478	1,923	5,417	87,292
Community Dentists	31,366	5,295	1,449	24,622	387,750
Randall L. Davis DMD	37,441	1,075	1,462	34,904	567,629
John P. Burke DMD	<u>35,750</u>	-	-	<u>35,750</u>	<u>532,161</u>
Totals	<u>361,673</u>	<u>47,494</u>	<u>9,390</u>	<u>304,789</u>	<u>\$4,965,004</u>

130 CMR 420.423(B) and 130 CMR 420.423(C) allow dental providers to periodically take full-mouth series (FMx) and panoramic radiographs to monitor the oral health of members. An FMx consists of a series<sup>7</sup> of bitewing and periapical radiographs and helps dentists identify conditions such as cysts, tumors, gum disease, or abscesses that exist in the bone surrounding the teeth. Panoramic radiographs provide a full picture of the mouth, including the complete upper and lower jaw, sinuses, and jaw joint, and show the general condition of teeth, including general tooth development, trauma, jaw joint pain, wisdom teeth, and certain abnormalities. FMx and panoramic radiographs provide an effective means for dental providers to establish baseline data for growth and development, monitor dental changes that occur over time, and detect anomalies of the supporting bone and its supporting structures. Consequently, FMx and panoramic radiographs clearly give dental providers an effective means to periodically monitor all aspects of members' oral health and should eliminate the need for dental providers to take separate periapical radiographs for anything other than specific dental problems as required by state regulations.

<sup>7</sup> EOHHS's regulations dated January 1, 2008 specify that an FMx must consist either of a minimum of 10 periapical films and two posterior bitewings, or two-to-four bitewings and two periapical films taken with a panoramic film.

We discussed these matters with MassHealth and DentaQuest officials, as well as with dentists and administrators from the 10 dental providers we visited during our audit. The statements they offered, which are paraphrased below, clearly demonstrate that MassHealth, DentaQuest, and dental provider staff have different opinions on the appropriate use of periapical radiographs and reflect MassHealth's failure to implement adequate controls over the use of periapical radiographs by its dental providers to ensure compliance with its regulations.

- MassHealth officials agreed that Dental Program regulations limit the use of periapical radiographs to problem-specific areas.
- Throughout the audit, DentaQuest's Contract Director contended that periapical radiographs could be used for both routine and problem-specific medically necessary reasons. However, in contrast, DentaQuest's Senior Dental Director confirmed that state regulations limit periapical radiographs to problem-specific areas. Moreover, the Senior Dental Director stated that many providers "treat to the benefits allowed and not to member's needs."
- MassHealth and DentaQuest officials agreed that the claims processing system does not include edits to ensure that periapical radiographs are taken solely for problem-specific areas as required by state regulations.
- Officials from Kool Smiles stated, "Periapical films are taken to not only identify potential dental disease or infection but also to monitor the normal growth and development of permanent teeth and screen against the presence of dental anomalies. This involves the use of periapical films to screen against periapical changes, ectopic eruption and other deleterious dental conditions such as cysts, mesiodens, supernumerary teeth and periodontal infection. Because many Kool Smiles patients are at increased risk of dental caries (tooth cavities), Kool Smiles dentists use their clinical judgment and rely not only on oral examination but also on digital radiography to monitor for dental caries. Because Kool Smiles is committed to early detection and intervention, the patient benefits from increased frequency of cavity detecting dental radiographs while still being protected by digital radiography."
- At the Holyoke Mall Dental Health Center, seven dentists commented on these matters. Three of the dentists stated they take periapical radiographs only on members that report dental pain, whereas the remaining four dentists stated that they routinely take periapical radiographs for all patients during dental check-ups.
- At Small Smiles, dentists basically agreed that periapical radiographs are used for (1) extractions, (2) palliative treatment of dental pain and infection, (3) checking the development of canine teeth, (4) detecting tooth decay in member's anterior teeth, and (5) assessing the spacing of teeth.



Clearly, the information gathered during our audit indicates that many providers are not taking periapical radiographs for the purposes intended under MassHealth's regulations.

**b. MassHealth Paid for at Least \$195,440 for Full-Mouth and Panoramic Radiographs That Exceeded Allowable Limits Established by Its Own Regulations and Included Potentially Fraudulent Claims**

130 CMR 420.423 and 130 CMR 420.431 establish limits on the quantity and frequency of the dental radiographs that are reimbursable under the Dental Program, which include the following:

*Full-Mouth Radiographs. The MassHealth agency pays for full mouth radiographs only for members aged six years and older and only once per member every three calendar years....*

*Bitewing Radiographs. The MassHealth agency pays for up to four bitewing films as separate procedures no more than twice per calendar year....*

*Panoramic Films; Non-Surgical Conditions (Members Under Age 21). The MassHealth agency pays for only one panoramic film per member per three-year period for non-surgical conditions, to monitor the growth and development of permanent dentition....*

*Orthodontic Radiographs. The MassHealth agency pays for radiographs as a separate procedure for orthodontic diagnostic purposes only for members under age 21, and only if requested by the MassHealth agency. Cephalometric films are to be used in conjunction with orthodontic diagnosis and are included in the payment for comprehensive orthodontic treatment (see 130 CMR 420.423(D)). Payment for radiographs in conjunction with orthodontic diagnosis is included in the payment for orthodontic services. If the MassHealth agency denies the request for comprehensive orthodontic treatment, the agency pays for pre-orthodontic work-up that includes payment for radiographs.*

DentaQuest and MassHealth officials stated that they had collaborated in designing system edits in the Dental Program's claims processing system to ensure that providers complied with all the limitations for radiographic services established by MassHealth's regulations. However, our visits to the 10 dental providers in our sample identified that these edits do not effectively ensure a dental provider's compliance with the limits on radiographic services imposed by these regulations. Specifically, during our audits of dental providers, we reviewed the actual radiographic films or digital copies of these films within member files, which allowed us to fully assess the radiographic services performed by each dental provider. Based on our review of these records, we determined that, contrary to state regulations, eight of these dental providers were paid for taking multiple FMx or panoramic radiographs within a three-year period. As detailed in the following table, the dental providers we visited took 32

FMx and 229 panoramic radiographs totaling \$20,303 for members under the age of 21 during our audit period, which exceeded the allowable limits established by MassHealth regulations.

### Radiographs Exceeding Allowable Limits

<u>Provider</u>	<u>FMx</u>	<u>Panoramics</u>	<u>Costs</u>
Small Smiles – Lawrence	3	21	\$1,913
Small Smiles – Springfield	1	27	2,215
Small Smiles – Worcester	7	13	1,556
Kool Smiles – Cambridge	-	133	10,014
Kool Smiles – Chelsea	-	6	476
Kool Smiles – New Bedford	-	8	624
Holyoke Mall Dental Health Center	11	10	1,705
Community Dentists	<u>10</u>	<u>11</u>	<u>1,800</u>
Total	<u>32</u>	<u>229</u>	<u>\$20,303</u>

During our audit, the owners, business managers, and dental practitioners from these eight offices provided comments about their dental practices and billing procedures, which are summarized as follows:

- During routine check-ups, dentists evaluate members' oral health and perform required dental procedures regardless of service limitations imposed by state regulations.
- The dental offices bill for all the services they provide but expect that DentaQuest will deny claims that exceed procedural limits set by state regulations.
- Clerical staff, at times, makes errors when preparing and submitting dental claims to DentaQuest. These errors are unintentional and occur when staff are transferring, interpreting, or transcribing information from dental charts to claim forms.

As noted above, MassHealth regulations prohibit orthodontists from submitting claims for dental radiographs as a separate diagnostic procedure unless specifically requested by MassHealth. In most instances, orthodontic radiographs are performed as an integral part of a greater orthodontic service (e.g., comprehensive orthodontic treatment) and therefore do not warrant a separate payment. However, at one dental provider we audited, John P. Burke DMD, whose practice is limited to orthodontics, we found that he routinely took radiographs on his patients and billed and received payments from MassHealth for these services as a

separate diagnostic procedure, even though they were not requested by MassHealth. According to payment data maintained in MMIS, Dr. Burke took 1,994 panoramic and 212 FMx radiographs on his patients between July 1, 2005 and May 22, 2009 and billed them as separate diagnostic procedures, which is unallowable in accordance with MassHealth regulations and should not have been paid. However, DentaQuest's claims processing system did not identify these radiographs as nonreimbursable orthodontic services. As a result, Dr. Burke received unallowable payments totaling \$175,137 for these radiographs during the audit period.

Of particular concern is that our test of 19 member files at Dr. Burke's office revealed that he submitted claims to DentaQuest for radiographs that were never actually taken. Based upon information in the Commonwealth's MMIS system, during our audit period, Dr. Burke had billed for 967 radiographs on these 19 members and received payments totaling \$12,095 from MassHealth. However, the members' dental files indicated that Dr. Burke only took 89 (9.2%) of the 967 radiographs that he billed to MassHealth.

Dr. Burke provided the following comments regarding his billing practices:

- MassHealth never raised any concerns over his claims.
- He was not aware of the specific regulatory requirements regarding dental radiographs.
- He bills "aggressively" in order to maximize payments under the Dental Program. In this regard, he stated that member dental charts, which detail the actual procedures performed during office visits, are not used to prepare claims that his office submits to MassHealth for payment. Rather, the claims his office submits to MassHealth for payment are not based on the actual services he provides but on a preset schedule of procedures that he is scheduled to perform on members regardless of whether he actually provides these services. Dr. Burke also reported to us that in certain cases, he would submit claims for radiographs that he did not take.

Because DentaQuest's claims processing system did not include edits to detect and deny claims for radiographs that were improper or violated the limits for these services as established by state regulations, the Commonwealth unnecessarily reimbursed nine of the 10 dental providers in our sample a total of \$195,440 during the audit period.

**c. Unnecessary Bitewing Radiographs Totaling at Least \$45,573**

Bitewing radiographs are primarily used to detect caries between adjacent teeth, on the chewing and grinding surface of the bicuspid<sup>8</sup> and molar teeth that have penetrated into the dentin, and under existing restorations. Although MassHealth regulations allow providers to bill for up to four bitewing radiographs per member up to twice per year, most of the dentists with whom we spoke stated that for children aged 10 and under, an oral examination combined with only two bitewing radiographs is sufficient to diagnose caries. This is because children in this age group, in most cases, only have first and second bicuspids and first molars, and their second set of molars does not typically erupt until around the age of 12, at which point it becomes necessary to begin taking four bitewing radiographs to achieve satisfactory diagnosis. We found however, that one of the 10 providers in our sample, Holyoke Mall Dental Health Center (Holyoke Dental) took four bitewing radiographs for over 50% of its patients, aged 10 years and under<sup>9</sup>, during the audit period. By taking four bitewing radiographs on children in this age group, Holyoke Dental may not have confined radiation exposure of members to the minimum necessary to achieve satisfactory diagnosis as required by MassHealth regulations.

In contrast, the remaining nine dental providers we audited rarely took four bitewing radiographs on members aged 10 years and under. In fact, a number of dentists at these locations stated that they did not see why it would be necessary to take four bitewing radiographs on children under the age of 10, whereas other dentists stated that four radiographs might be necessary for children in this age group in certain unusual circumstances (e.g., for children with large teeth or when a child's 12-year molars have erupted prematurely). The following table details the extent to which the 10 dental providers took four bitewing radiographs on members aged 10 years and under during fiscal year 2008.

---

<sup>8</sup> Bicuspid are transitional teeth located between the canine and molar teeth.

<sup>9</sup> Some participating dentist indicated that the 12-year molars can erupt prior to a child's twelfth birthday and, in such instances, four bitewings would be appropriate for satisfactory diagnosis. Therefore, we only included members aged 10 years and less in our analysis to present this problem in the most conservative manner possible.

<u>Providers</u>	<u>Total Members Served</u>	<u>Four Film Bitewings Taken on Members</u>	<u>Percent</u>
Small Smiles – Lawrence	4,621	-	0%
John P. Burke DMD	366	-	0%
Small Smiles – Springfield	8,110	4	<1%
Small Smiles – Worcester	7,814	10	<1%
Kool Smiles – Cambridge	2,152	12	<1%
Kool Smiles – Chelsea	3,092	27	<1%
Kool Smiles – New Bedford	5,066	43	<1%
Randall L. Davis DMD	2,033	65	>3%
Community Dentists	2,861	222	>7%
Holyoke Mall Dental Health Center	1,272	673	53%

Based on these facts, we then compared the number of bitewing radiographs taken by Holyoke Dental to all other dental providers who had taken four bitewings radiographs on children 10 years and under during fiscal year 2008 based on information in MMIS. Our analysis identified a total of 447 participating dental offices that had submitted claims for taking four bitewing radiographs on children aged 10 years and under during this fiscal year. However, of this total, only 10 dental providers, or 2.2%, submitted 100 or more claims for these bitewings, whereas, as detailed above, Holyoke Dental submitted 673 claims for these bitewings. In fact, as detailed in the table below, Smile Massachusetts PLLC was the only dental provider that submitted a greater number of claims than Holyoke Dental (1,253 versus 673 claims, respectively) for four bitewings taken on children in this age group during fiscal year 2008.

#### **10 Largest Claimants for Bitewing Radiographs-Fiscal Year 2008**

<u>Provider</u>	<u>Four Bitewings Claimed</u>
Smile Mass. PLLC	1,253
Holyoke Dental	673
Community Dentist	231
Dorchester House CHC	215
Holyoke Dental Associates	200
Kool Smiles PC 9765000	174

JP Family Dental, PC	160
Tufts Dental Clinic - Undergraduate	134
Full Service Dental Health PC	114
Dental Dreams, LLC	<u>108</u>
Total	<u>3,262</u>

The remaining 437 dental providers, on average, submitted only 8.5 claims for members aged 10 years and under.

Based upon these initial results, we expanded our analysis of Holyoke Dental to include the entire audit period, during which we found that it had taken four bitewing radiographs on members aged 10 years and under on 3,370 separate occasions. Moreover, we found that Holyoke Dental took four bitewing radiographs on children as young as three. The table below details, by age group, the number of such claims that Holyoke Dental submitted during the audit period.

<u>Member Age</u>	<u>Fiscal Year 2006</u>	<u>Fiscal Year 2007</u>	<u>Fiscal Year 2008</u>	<u>July 1, 2008 through May 22, 2009</u>	<u>Total</u>
3 Years	9	9	3	2	23
4 Years.	51	27	19	8	105
5 Years	120	97	49	28	294
6 Years	141	149	82	29	401
7 Years	229	170	123	64	586
8 Years	251	208	126	64	649
9 Years	235	218	135	68	656
10 Years	<u>262</u>	<u>197</u>	<u>136</u>	<u>61</u>	<u>656</u>
Total	<u>1,298</u>	<u>1,075</u>	<u>673</u>	<u>324</u>	<u>3,370</u>

Because Holyoke Dental took these potentially unnecessary bitewing radiographs, it may not have confined radiation exposure to the minimum necessary to achieve satisfactory diagnosis, as required by MassHealth regulations. In addition, Holyoke Dental's taking bitewing

radiographs in this manner increased costs to MassHealth's Dental Program by as much as \$45,573 during the audit period, as indicated in the table below:

<u>Fiscal Year</u>	<u>Members Treated Aged (0 to 10)</u>	<u>Bitewings, Four Films</u>	<u>Bitewings Actual Costs, Four Films</u>	<u>Bitewings Estimated Costs, Two Films</u>	<u>Potential Savings</u>
2006	2,810	1,298	\$47,485	\$31,152	\$16,333
2007	2,041	1,075	43,579	29,025	14,554
2008	1,272	673	28,252	18,171	10,081
7/1/08 – 5/22/09	<u>664</u>	<u>324</u>	<u>13,677</u>	<u>9,072</u>	<u>4,605</u>
Total	<u>6,787</u>	<u>3,370</u>	<u>\$132,993</u>	<u>\$87,420</u>	<u>\$45,573</u>

We brought this matter to the attention of Holyoke Dental staff, who provided us with the following comments:

*For children with transitional dentition (after the eruption of first permanent tooth between age 5 and 7), panorex and posterior bite wings (usually 4) and/or necessary Periapicals are indicated for new patients. Posterior bite wings (usually 4) are indicated for recall patients at 6 month intervals. These are the protocols consistent with ADA/US Department of Health and Human Services Guidelines for Prescribing Dental Radiographs. The providers at Holyoke Mall Dental Health Center followed these guidelines while taking into consideration an individual patient's relevant history and clinical findings to develop the optimal radiographic examination for the patients.*

However, as indicated in the Appendix to this report, the protocols followed by Holyoke Dental, as detailed in its comments, are not consistent with ADA/US Department of Health and Human Services Guidelines for prescribing Dental Radiographs. In this regard, the guidelines do not specify the exact number of bitewing radiographs to take on patients including children with transitional dentition. Therefore, Holyoke Dental's decision to take four bitewing radiographs on children is clearly discretionary. In addition, contrary to Holyoke Dental's assertion, the guidelines do not recommend posterior bitewing exams be performed at six month intervals on all recall patients. In fact, the guidelines recommend that posterior bitewing exams be performed at 12- to 24-month intervals on recall patients with no clinical caries.

Moreover, Holyoke Dental's protocols do not reflect a conscious decision to minimize radiation exposure to the minimum necessary to achieve satisfactory diagnosis as required by MassHealth regulations.

DentaQuest's contract with the Commonwealth includes a section entitled, Utilization Review/Fraud and Abuse Prevention. Under this section, DentaQuest is required to develop a process for reviewing all providers' patterns of claims to determine whether the claims being submitted by any dental provider fall outside of expected norms. However, when we brought this matter to their attention, DentaQuest officials stated that they were unaware of Holyoke Dental's unusual pattern of taking four bitewing radiographs on members aged 10 years and under.

**d. Bitewing Radiographs Prescribed Contrary to Federal Guidelines**

In November 2004, the U.S. Food and Drug Administration (FDA) updated its guidelines for prescribing dental radiographs (see Appendix). These guidelines provide recommendations for prescribing dental radiographs based upon six types of patient encounters (new patient, recall patient with clinical caries or at increased risk for caries, recall patient with no clinical caries, recall patient with periodontal disease, patient for monitoring of growth and development, and patient with other circumstances). Regarding recall patients with no clinical caries and not at increased risk for caries, the FDA recommends the following radiographs for children, adolescents, and adults.

- *Child with Primary and Transitional Dentition: Posterior bitewing exam at 12-24 month intervals if proximal surfaces cannot be examined visually or with a probe*
- *Adolescent with Permanent Dentition: Posterior bitewing exam at 18-36 month intervals*
- *Adult, Dentate or Partial Edentulous: Posterior bitewing exam at 24-36 month intervals*

The FDA's guidelines also provide general recommendations applicable to all patient types. For example, the FDA recommends (a) radiographic screening for the purpose of detecting disease before clinical examination should not be performed and (b) thorough clinical examination, consideration of the patient history, review of any prior radiographs, caries risk assessment and consideration of both dental and the general health needs of the patient should precede radiographic examination. In other words, because each patient is unique, radiographs should not be an automatic reaction for routine care; rather, radiographs should be taken only when there is an expectation that the diagnostic yield will affect patient care.

We found that, contrary to the FDA guidelines, providers routinely took bitewing radiographs on recall patients who had no clinical caries. Specifically, our audit found that 32



of the 258 members in our sample received bitewing radiographs during their regular six-month dental check-ups even though dental records for these 32 members indicate that they were caries-free during the entire audit period. In addition, these 32 members were at low risk of developing caries, given that they had received continuing preventive dental care during the period, including oral examinations, prophylaxis, fluoride treatments, and dental sealants, and most lived in communities that treated their drinking water with fluoride. Since these 32 members neither had a history of caries nor seemed at high risk of developing caries, the nine providers that routinely took bitewing radiographs on the 32 members, in our opinion, did not adhere to the FDA's guidelines and may have exposed the members to levels of radiation greater than necessary to achieve satisfactory diagnosis. The table below details the 32 members that we identified in our sample that were given bitewing radiographs in a routine manner contrary to FDA recommendations.

<u>Service Provider</u>	<u>Member Number</u>	<u>Check-Ups</u>	<u>Caries</u>	<u>Bitewing</u>	<u>Sealants</u>	<u>Fluoride Treatment</u>	<u>Member's Residence</u>	<u>Fluoridated City/Town Water</u>
Community Dentist	10002xx7	5	0	10	12	6	Lowell	Yes
Community Dentist	10001xx1	6	0	24	14	6	Lawrence	Yes
Community Dentist	10002xx8	6	0	16	15	6	Lawrence	Yes
Community Dentist	10001xx4	7	0	14	16	7	Lowell	Yes
Holyoke Dental	10002xx3	7	0	28	11	7	Holyoke	Yes
Holyoke Dental	10002xx3	6	0	24	14	8	Chicopee	No
Holyoke Dental	10001xx4	7	0	28	11	7	Springfield	No
Holyoke Dental	10002xx2	7	0	24	16	7	Springfield	No
Holyoke Dental	10002xx7	7	0	28	19	7	Holyoke	Yes
Holyoke Dental	10002xx3	7	0	26	16	7	East Longmeadow	No
Kool Smiles- Cambridge	10001xx1	4	0	16	12	4	Medford	Yes
Kool Smiles- Cambridge	10003xx3	6	0	12	0	6	Cambridge	Yes
Kool Smiles- Cambridge	10001xx3	6	0	24	11	6	Cambridge	Yes
Kool Smiles- Cambridge	10002xx2	6	0	12	5	6	Boston	Yes
Kool Smiles- Cambridge	10002xx8	5	0	10	4	5	Somerville	Yes
Kool Smiles- Cambridge	10002xx2	7	0	14	11	7	Cambridge	Yes
Kool Smiles- Chelsea	10002xx9	5	0	20	15	5	Revere	Yes
Kool Smiles- Chelsea	10002xx2	4	0	16	10	4	Saugus	Yes
Kool Smiles-New Bed.	10002xx7	6	0	12	4	6	New Bedford	Yes
Kool Smiles-New Bed.	10002xx6	6	0	12	5	6	New Bedford	Yes
Randall Davis, DMD	10001xx7	5	0	20	12	6	Andover	Yes
Randall Davis, DMD	10001xx1	6	0	22	8	7	Lawrence	Yes
Randall Davis, DMD	10001xx9	5	0	12	10	5	Lawrence	Yes
Randall Davis, DMD	10004xx1	6	0	18	15	6	Lawrence	Yes

Randall Davis, DMD	10001xx5	7	0	26	12	8	Lawrence	Yes
Randall Davis, DMD	10001xx1	7	0	22	11	7	Andover	Yes
Randall Davis, DMD	10001xx1	7	0	20	15	7	Lawrence	Yes
Small Smiles Lawrence	10002xx3	6	0	12	16	6	Methuen	No
Small Smiles Lawrence	10003xx3	6	0	12	7	6	Haverhill	Yes
Small Smiles Springfield	10004xx8	6	0	12	8	6	Ludlow	No
Small Smiles Springfield	10003xx2	7	0	12	12	5	Springfield	No
Small Smiles Worcester	10002xx8	<u>8</u>	<u>0</u>	<u>16</u>	<u>12</u>	<u>8</u>	Southbridge	Yes
Totals Members		<u>196</u>	<u>0</u>	<u>574</u>	<u>359</u>	<u>200</u>	25 of 32 members have fluoridated town/city water supply	
Average Totals		<u>6</u>	<u>0</u>	<u>18</u>	<u>9</u>	<u>6</u>		

Comments provided to us by officials at these nine provider locations indicated that the FDA's guidelines in this area are applied inconsistently from one dental provider location to the next as well as within the same dental office. For example, the Director of Compliance for Kool Smile's provided the following comments:

*Kool Smiles has made the investment on behalf of its patients to only use digital radiography minimizing radiation exposure. Because many Kool Smiles patients are at increased risk for dental caries, Kool Smiles dentists use their clinical judgment and rely not only on oral examination but also on digital radiography to monitor for dental caries. Because Kool Smiles is committed to early detection and prevention, the patient benefits from increased frequency of cavity detecting dental X-rays while still being protected by digital radiography.*

By contrast, we were informed that Small Smiles dentists had routinely taken bitewing radiographs on patients until 2009. Small Smiles officials stated that, since that time, they implemented a new dental practice protocol that includes the FDA's recommendations on prescribing dental radiographs. Small Smiles officials stated that this new protocol has resulted in less frequent radiographs for members. At Holyoke Dental, we were told that bitewing radiographs are routinely taken prior to a member's dental examination. Lastly, at Community Dentist and Randall Davis, DMD, we were informed that dentists use their professional judgment when determining a member's need for dental radiographs.

Under its contract, DentaQuest is required to identify standards of care based on published recommendations of nationally recognized authorities such as the American Association of Pediatric Dentistry (AAPD). Moreover, DentaQuest's contract requires it to monitor providers' compliance with AAPD requirements related to dental care and standard dental practice, and work with providers to develop corrective action plans to bring providers into compliance with community standards for dental practice. The AAPD endorses, and in fact

incorporated, the FDA's guidelines for prescribing dental radiographs that appears in the Appendix to this report into its own guide titled, "Guideline on Prescribing Dental Radiographs for Infants, Children, Adolescents, and Persons with Special Health Care Needs."

We spoke with DentaQuest's Senior Dental Director about providers not following FDA and AAPD guidelines for prescribing radiographs for recall patients with no clinical caries. The Senior Dental Director commented that some dentists practice what he referred to as "defensive dental medicine" to avoid potential malpractice lawsuits. He also stated that caries can develop at a rapid rate, and, in the grand scheme of things, it is less expensive to take bitewing radiographs than to treat dental decay, which can worsen rapidly if undetected and necessitate costly restorative procedures. Although the Senior Dental Director's comments seem valid for children and adolescents with a history of caries and those at high risk of developing caries, our concern deals with children and adolescents who have no history of caries and receive ongoing diagnostic and preventive dental care. Based upon FDA and AAPD guidelines, such members do not require bitewing radiographs during each office visit. Instead, they should be taken at 12- to 36-month intervals, depending upon the patient's age and dentition. Ultimately, by reducing the frequency of bitewing radiographs for this patient population, MassHealth's intent to confine radiation exposure of members to the minimum necessary to achieve satisfactory diagnosis will be further realized while at the same time reducing the costs of the Dental Program to the Commonwealth.

### ***Recommendation***

In order to address our concern relative to the proper use of periapical radiographs, we recommend that MassHealth, in conjunction with DentaQuest, develop internal controls to monitor compliance with MassHealth's regulations relative to the use of these radiographs. We further recommend that MassHealth, in conjunction with DentaQuest, fully clarify the issue of the proper use of periapical radiographs and what procedures relative to periapicals are reimbursable through its dental bulletins and quarterly newsletters. Finally, MassHealth should recoup the \$4,965,004 that we identified as unallowable charges for periapical radiographs to the Commonwealth during the audit period.

---

In order to address our concern that dental providers are billing and being paid for full-mouth series and panoramic radiographs that exceed the limits established by MassHealth's regulations, we recommend that DentaQuest and MassHealth modify the system edits in place in the Dental Program's claims processing system to effectively identify and deny claims that violate the limits for these procedures established by these regulations. We further recommend that MassHealth recover the \$195,440 that we identified as unallowable payments it made to the providers we audited for these services during the period covered by our audit. Also, DentaQuest should fully analyze, to the extent possible, all the claims for these radiographic services that it processed for its dental providers other than those we reviewed, to identify all other instances of overbillings for these services. Based on this analysis, MassHealth should recover the amounts for any additional overbillings identified.

In order to ensure that dental providers do not routinely take four bitewing radiographs on members aged 10 years and less unless medically necessary, we recommend that MassHealth amend its regulations to specifically prohibit these types of procedures. In addition, MassHealth and DentaQuest should require Holyoke Dental to document the medical necessity of taking four bitewing radiographs on children aged 10 years or less during the audit period. If Holyoke Dental cannot adequately explain this need, then MassHealth should consider recovering the \$45,573 that it paid this provider for the bitewing radiographs in question.

As previously noted, our audit identified members who had no history of caries and were not at an increased risk for caries but were given bitewing radiographs at six-month intervals rather than the 12- to 36- month intervals recommended by the FDA. Therefore, we recommend that MassHealth and DentaQuest prepare dental bulletins and newsletters that encourage Dental Program providers to follow FDA guidelines for these radiographs. In addition, DentaQuest should periodically analyze claims data to identify any patterns of overutilization of bitewing radiographs. In situations where it appears that bitewing radiographs are being consistently used in a manner that is not within FDA guidelines, DentaQuest should ensure that such dental providers are properly instructed on these guidelines. Finally, MassHealth should initiate, in conjunction with the state's Office of the Attorney General, an investigation of claims submitted by Dr. Burke that were not subject to our review.

### **Auditee's Response**

In response to this issue, MassHealth officials provided the following comments:

*With respect to the \$4,965,004 the OSA estimates may be attributed to unallowable periapical X-rays, the agency respectfully submits that the OSA may have applied the MassHealth regulation too narrowly, as explained below. Where OSA did not provide MassHealth the actual documentation in the provider and member records on which the OSA based its findings, we cannot agree to these findings. We believe that providers may generally be in compliance with the agency's intended scope of its regulation. Nonetheless, based on the recommendation of OSA, MassHealth will initiate a specific radiology audit on the 10 providers who were the subject of this audit. The OSA's citation of 130 CMR 420.423 (3) from TL DEN-80 (1/1/08) quotes a paragraph that inadvertently omitted the word "or" after "where extraction is anticipated..." during the adoption of that regulation. The following is the wording of the regulation prior to 1/1/08 and as it was applied and intended to have been worded from 1/1/08 to the present:*

*(3) Periapical Films. Periapical films may be taken for specific areas where extraction is anticipated, or when infection, periapical change, or an anomaly is suspected, or when otherwise directed by the MassHealth agency. A maximum of four periapical films is allowed per member per visit. (emphasis added)*

*This oversight in the dental regulation was unintended and will be corrected in the regulations promulgated for September 3, 2010. MassHealth believes that the inadvertent omission of the word "or" may have caused some discrepancy in the interpretation applied to this audit and has resulted in incorrect findings. As MassHealth never intended to make this change, dental providers have continued to conduct business as if "or" had not been omitted, consistent with reasonable standards of dental care.*

*Dentistry does not use diagnostic codes and therefore determining the dentist's reasoning for periapical X-rays during claims processing is not possible. While this could be determined on audit, periapical film is a common X-ray used to determine tooth development patterns, evaluation of decay, periapical issues, etc., and should not be limited to cases where the potential for extraction is present. Limiting the use of periapicals to instances where extraction is anticipated would relegate providers to waiting for significant decay issues to occur and then taking an X-ray to see if the tooth can be saved or should be removed...*

*Prior to release of the Draft Audit Report, the MassHealth Dental Director had initiated amendments for the dental regulations, which included incorporation of clinical guidelines concerning radiographs that align with OSA's recommendation. .... MassHealth's proposed regulation amendments include adoption of the American Dental Association clinical guidelines regarding "The selection of patients for Dental Radiographic examination." The FDA and the ADA jointly developed, published, and support this guideline for patient radiographs—the document listed in the Draft Audit Report Appendix. Accordingly, the FDA guidelines cited by the OSA in its Draft Audit Report are the same as the ADA clinical guidelines on which MassHealth based the standard in the proposed regulation at 130 CMR 420.423 (B)(2). The proposed regulation further requires that providers document variations from the ADA clinical guidelines in the member's dental record...*

*Again, where the OSA did not provide MassHealth with the actual documentation in the provider and member records on which the OSA based this finding, we cannot agree to the findings regarding FMx and panoramic X-rays exceeding the regulatory limits. Panoramic films may be taken in addition to an FMX within a three year time period when medically necessary. As noted above, based on the recommendation of OSA, MassHealth will initiate a specific radiology audit to ascertain whether the providers' radiographs are in compliance with MassHealth regulations. With respect to the more than \$175,000 of this amount attributed to Dr. B, without having reviewed the actual documentation in the provider and member records on which the OSA based this finding, we cannot agree to the findings. MassHealth has a very good working relationship with the Medicaid Fraud Division (MFD) and as standard practice refers all appropriate cases to the division. In a recent program integrity audit, MassHealth's relationship with MFD was noted by the Centers for Medicare and Medicaid Services as a best practice.*

*Again, where the OSA did not provide MassHealth with the actual documentation in the provider and member records on which the OSA based this finding, we cannot agree to the findings regarding medically unnecessary bitewing X-rays, in contravention of MassHealth regulations. With respect to the suggestion of a regulation change, as noted above, MassHealth has proposed amendments to its regulations adopting the ADA's standards concerning radiographs with a proposed effective date of September 3, 2010 (copy attached). Although we cannot agree to the findings, we know that the dental provider noted is included in the radiology audit MassHealth intends to pursue as indicated in response to Audit Finding 1a, above.*

*.... As noted above, MassHealth has proposed amendments to this regulation adopting the ADA's standards concerning radiographs—which are identical to and were developed in conjunction with, the FDA standards. In addition, it has been MassHealth's longstanding practice through DentaQuest to conduct periodic data analysis to identify outliers and overutilization of codes. Again, MassHealth has a very good working relationship with the Medicaid Fraud Division (MFD) and as standard practice refers all appropriate cases to the division.*

### **Auditor's Reply**

In its response, MassHealth states that it had omitted the word “or” from the adoption of 130 CMR 420.423 (3) and believes that the wording of this regulation in effect during our audit period may have resulted in a discrepancy in how we interpreted its meaning. As noted in our report, during our audit, we appropriately tested compliance to MassHealth's regulations including 130 CMR 420.423(3) as they were legally promulgated. Moreover, the wording change indicated and ultimately made by MassHealth would have had no effect on how we interpreted MassHealth's regulations or the conclusions we reached based on our audit testing. Specifically, even with the new regulatory language change, it is clear that periapical X-rays are to be used for specific purposes and should not be taken on a routine basis. This fact is not only supported by MassHealth's own regulations but also ADA guidelines. Despite this, in addition to identifying numerous instances where periapical X-rays were not being used as intended (i.e., on a routine basis), many of the dentists in our sample told us that they routinely take periapical X-rays to

monitor tooth growth and development rather than to specifically monitor abnormalities or suspected problems. As noted in our report, and consistent with ADA guidelines, tooth growth and development is appropriately monitored by dentists using full-mouth X-rays which are allowed under MassHealth regulations and separate periapical X-rays should not be used routinely for these purposes. Further, we do not agree with MassHealth's assertion that we may have applied the requirements of its regulations to narrowly. As stated in our report, one of the objectives of MassHealth's regulations is to confine a member's exposure to radiation from radiographs to the minimum necessary to achieve satisfactory diagnosis. Specifically, 130 CMR 420.423(A), states, in part:

*The MassHealth agency pays for radiographs/diagnostic imaging taken as an integral part of diagnosis and treatment planning. The intent is to confine radiation exposure of members to the minimum necessary to achieve satisfactory diagnosis.*

In order to ensure that this is accomplished, MassHealth promulgated 130 CMR 420.423(3), which details the specific conditions under which MassHealth will pay for periapical radiographs that are taken independent of a full-mouth examination, as follows:

*Periapical films may be taken for specific areas where extraction is anticipated when infection, periapical change, or an anomaly is suspected, or when otherwise directed by the MassHealth agency. A maximum of four periapical films is allowed per member per visit.*

The intent of this regulation is clearly to limit these type of X-rays so they are not taken routinely but rather for a specific purpose. It is important to point out, in determining the number of what we believe to be excessive periapical X-rays, that we excluded from our total every instance where the dentist believed that extraction was anticipated and/or where the patient was experiencing pain or had an infection.

Further, contrary to what MassHealth asserts in its response, we did not state or even imply that periapical X-rays should be limited only to those instances where extraction is anticipated. Rather, as stated in our report, the use of these X-rays should be limited to those instances where a problem is suspected which could include pain, infection, or any other type of abnormality as mandated by MassHealth regulations and ADA guidelines and are not to be used on a routine basis. There are clearly many other effective ways to monitor tooth development and growth, including oral examinations and full-mouth X-rays.

In its response, MassHealth points out that there are no dental codes, and therefore determining a dentist's reasoning for periapical X-rays during claims processing is not possible. We agree with this assertion and as a result, given the requirements of MassHealth's regulations in this area, we believe dentists should be required to document why they took periapical X-rays in their records so that MassHealth can effectively monitor compliance to its regulations. Further, although there may be no effective way to monitor this situation on a claim-by-claim basis, DentaQuest, in accordance with the terms and conditions of its contract with the Commonwealth, should be monitoring the overall data in this area to see if any problems, such as the over-utilization of periapical X-rays, exist.

MassHealth asserts that because we did not provide it with the actual documentation in the provider and member records on which the OSA based this finding, it cannot agree to the finding. However, as noted in our report, throughout our audit process, both MassHealth and DentaQuest officials were provided with information and actual copies of records to review relative to the issues presented in this audit result. In all cases, MassHealth and DentaQuest officials acknowledged that problems existed but could not offer explanations. Further, our audit findings were largely based on information we obtained in the state's MMIS system, which is available to both MassHealth and DentaQuest. Our file reviews were only used to substantiate the issues we identified during our queries of this MMIS information. Moreover, in many cases it is not necessary to actually review dental records to identify and assess issues. For example, in the case of Dr. Burke, we found that he routinely took radiographs on his patients and billed and received payments from MassHealth for these services as a separate diagnostic procedure, even though they were not requested by MassHealth. According to payment data maintained in MMIS, Dr. Burke took 35,750 periapical, 1994 panoramic, and 212 FMx radiographs on his patients between July 1, 2005 and May 22, 2009 and billed them as separate diagnostic procedures, which is unallowable in accordance with MassHealth regulations and should not have been paid. However, DentaQuest's claims processing system did not identify these radiographs as nonreimbursable orthodontic services. As a result, Dr. Burke received unallowable payments totaling \$707,298 for these radiographs during the audit period.

This fact was clearly evident by the information in the MMIS system which contained all the information necessary to assess the reasonableness of these billings. As stated in our report, we determined that because DentaQuest's claims processing system did not include edits to detect



and deny claims for radiographs that were improper or violated the limits for these services as established by state regulations, the Commonwealth unnecessarily reimbursed the dental providers in our sample a total of \$5,206,017 during the audit period.

Finally, in its response, MassHealth states that it is taking measures including amending its regulations and conducting reviews of billings submitted by some of its dental providers. We believe such actions are necessary and responsive to our concerns. In this regard, MassHealth points out that it is changing its regulations to adopt ADA standards. However, our review of these regulatory changes indicates that they only apply to Bitewing X-rays. Consequently, we recommend that MassHealth also amend its regulations to adopt ADA standards relative to periapical X-rays and also implement the other recommendations we made relative to this issue. Also, ADA guidelines do not specify the number of bitewings that should be taken on children. Consequently, the adoption of ADA regulations will not address this particular issue. DentaQuest must periodically conduct trend analyses of MassHealth's dental payment data to identify unusual patterns or individual outliers and stop this practice.

**2. MASSHEALTH HAS NOT ADEQUATELY CONTROLLED ORTHODONTIC SERVICES, WHICH RESULTED IN COMMONWEALTH OVERCHARGES TOTALING AS MUCH AS \$321,553 AT ONE PROVIDER, INCLUDING POTENTIALLY FRAUDULENT CHARGES FOR SERVICES NOT PERFORMED**

MassHealth has established regulations governing orthodontic services for the Dental Program under 130 CMR 420.423 and 130 CMR 420.431. These regulations provide service descriptions and limitations for all covered orthodontic services. However, our audit found that MassHealth has not established adequate controls to ensure that dental providers submit claims for pre-orthodontic treatment visits and oral/facial photographic images in accordance with these regulations. Moreover, we found that DentaQuest's claims processing system does not contain adequate edits to identify and reject unallowable claims for orthodontic services. Consequently, we found that one orthodontist we visited, John P. Burke DMD, received payments for pre-orthodontic treatment visits and oral/facial photographic images that exceeded the amounts allowable under state regulations by as much as \$321,553 during the audit period. We also found a number of instances in which this provider billed and received payments from MassHealth for dental services that he did not perform.

MassHealth's Dental Program offers orthodontic care for members under age 21 with severe and handicapping malocclusion (abnormality in the coming together of teeth). All orthodontic services require prior authorization from DentaQuest with the exception of pre-orthodontic treatment visits and orthodontic retention (removal of appliances, construction and placement of retainers). MassHealth has established limits on orthodontic consultations and oral/facial photographic images under 130 CMR 420.431(B) and 420.423(E), respectively, as follows:

*(B) Orthodontic Consultation. The agency pays for an orthodontic consultation only for members under age 21 and only for the purpose of determining whether orthodontic treatment is necessary, and if so, when treatment should begin. The agency pays for an orthodontic consultation as a separate procedure (see 130 CMR 420.413) only once per six-month period. The agency does not pay for an orthodontic consultation as a separate procedure when used in conjunction with ongoing or planned (within six months) orthodontic treatment. The payment for an orthodontic consultation as a separate procedure does not include models or photographic prints. The agency may request additional consultation for any orthodontic procedure.*

*Oral/Facial Photographic Images.*

*(1) The agency pays for digital or photographic prints, not slides, only to support prior-authorization requests for orthodontic treatment.*

*(2) Payment for digital or photographic prints is included in the payment for orthodontic services. The agency does not pay for digital or photographic prints as a separate procedure (see 130 CMR 420.413). Payment for orthodontic treatment includes payment for services provided as part of the pre-orthodontic work-up, except if the agency denies the orthodontic treatment. In that case, the agency pays for the pre-orthodontic work-up.*

However, we found that MassHealth has not established adequate controls to ensure that dental providers are only paid for claims covering (a) pre-orthodontic treatment visits and (b) oral/facial photographic images in accordance with MassHealth's regulations, as discussed in detail below.

**a. Pre-Orthodontic Treatment Visits**

As noted above, 130 CMR 420.431(B) states that MassHealth will pay for an orthodontic consultation as a separate procedure only once every six-month period. Also, this regulation specifies that MassHealth will not pay for an orthodontic consultation as a separate procedure when used in conjunction with ongoing or planned (within six months) orthodontic treatment. However, our audit of John P. Burke, DMD revealed that he was paid for pre-orthodontic treatment visits that occurred in conjunction with ongoing or planned orthodontic treatment. Specifically, for the 19 member files we reviewed during our

site visit to Dr. Burke's office, Dr Burke submitted and was reimbursed for 78 claims for pre-orthodontic treatment visits that totaled \$2,254. Of these claims, 56 pre-orthodontic treatment visits, or 72%, occurred within six-month's time of planned orthodontic treatments, during ongoing orthodontic treatment, or after orthodontic treatments were complete. Consequently, the \$1,659 that Dr. Burke received from MassHealth for these 56 visits represents an unallowable charge to the Commonwealth. If this 72% error rate is applied to all pre-orthodontic visits billed by Dr. Burke, then he was paid as much as \$101,948 for visits that violated state regulations during the audit period. We calculated this amount by applying the 72% error rate to the total payments of \$141,595 that Dr. Burke received for pre-orthodontic treatment visits during the audit period. Although our sample of Dr. Burke's member files was judgmental and was not done using statistical sampling techniques, we believe that the 72% error rate may provide a reasonable if not conservative estimate of the inappropriate billings submitted by Dr. Burke to MassHealth for these services because Dr. Burke admitted that he is aware that his office submits claims for pre-orthodontic visits in a manner contrary to state regulations. For example, he stated that he routinely submits claims and receives payments from MassHealth for pre-orthodontic visits that are not reimbursable under regulations promulgated by MassHealth. Our tests of the 19 member files detailed the pervasiveness of this problem. Specifically, in 100% of the member files we reviewed, Dr. Burke submitted at least one claim for a pre-orthodontic treatment visit that was nonreimbursable in accordance with MassHealth regulations and, on average, submitted three such claims for each member included in our sample.

We brought this matter to the attention of DentaQuest and MassHealth officials, who provided the following response:

*A system edit is currently in place to deny two orthodontic consultation visits (D8660) within a 6-month period, as the regulation requires. There is also an edit to recoup any fees paid for any pre-orthodontic consultation visit if comprehensive orthodontic treatment (D8080) begins within 6 months following the date of service of the pre-orthodontic consultation visit. DentaQuest will enhance this edit to also look back for any occurrence of D8080 or D8670 (periodic orthodontic treatment visit) whenever a D8660 is billed. DentaQuest will enhance this edit to capture any pre-orthodontic consultation visit that follows comprehensive orthodontic treatment (D8080). Thus, the system will "look" back for any occurrence of D8080 or D8670 whenever a D8660 is billed. This enhancement to the edit will be implemented in the next 30-45 days and will prevent the pre-orthodontic consultation visit code from being billed after comprehensive treatment is billed.*

We agree with DentaQuest and MassHealth that a system edit is currently in place within the Dental Program's claims processing system that will deny payment for two pre-orthodontic treatment visits within a six-month period. However, contrary to the assertion of DentaQuest and MassHealth officials, an edit is not in place to recover any fees paid for any pre-orthodontic treatment visit if comprehensive orthodontic treatment begins within six months following the date of service of the pre-orthodontic treatment visit. This is evidenced by the fact that our sample test identified numerous instances of Dr. Burke submitting claims for pre-orthodontic treatment visits that occurred within six-months of planned orthodontic treatments, yet DentaQuest's and MassHealth's edits did not identify and reject these claims.

**b. Oral Facial Photographic Images**

Our audit found that Dr. Burke was paid \$219,605 for oral/facial photographic images (photographic images) in violation of state regulations. Dr. Burke submitted 4,684 unallowable claims for photographic images taken on members prior to and during orthodontic treatment. Dr. Burke's claims, which involved 2,417 members, should have been denied by DentaQuest since they violated 130 CMR 420.423(E) (2), which states, in part,

*Payment for digital or photographic prints is included in the payment for orthodontic services. The MassHealth agency does not pay for digital or photographic prints as a separate procedure....*

The table below summarizes the unallowable payments received by Dr. Burke for oral/facial photographic images during the period July 1, 2005 through May 22, 2009.

<u>Fiscal Year</u>	<u>Paid Claims</u>	<u>Amount</u>
2006	1,005	\$47,079
2007	1,223	57,300
2008	1,281	60,071
July 1, 2008 through May 22, 2009	<u>1,175</u>	<u>55,155</u>
Total	<u>4,684</u>	<u>\$219,605</u>

In addition, our sample of 19 member files at Dr. Burke's office identified that he submitted 58 claims for photographic images totaling \$2,726 in violation of state regulations. Specifically, Dr. Burke filed between one and five claims for each member. MassHealth paid

these claims because DentaQuest's claims processing system did not identify them as unallowable charges. Of particular concern is that the sampled member files did not contain 24 (41%) of the 58 photographic images for which Dr. Burke received payment from MassHealth. These undocumented images, at a minimum, represent an overpayment by the Commonwealth as defined under 130 CMR 450.235.

*Overpayments include, but are not limited to, payments to a provider (A) for services that were not actually provided... (E) for services for which a provider has failed to make, maintain, or produce such records, prescriptions or other documentary evidence as required... (G) for services billed that result in duplicate payments.*

However, based upon Dr. Burke's previously discussed questionable billing practices, it is likely that these services may not have been provided.

### ***Recommendation***

In order to ensure that participating orthodontists submit claims for pre-orthodontic treatment visits and photographic images in accordance with MassHealth regulations, we recommend that MassHealth and DentaQuest take the measures necessary to ensure that the Dental Program's claims processing system can, in every instance, effectively identify and deny claims that violate these regulations. Further, MassHealth should recover from Dr. Burke the \$1,659 we identified as unallowable payments he received for pre-orthodontic treatment visits and the \$219,605 we identified as unallowable payments for photographic images that he received during our audit period. Additionally, MassHealth and DentaQuest should conduct their own review of all of Dr. Burke's billings for these services over the last seven years, in addition to the ones that we reviewed during our audit. Based on this review, MassHealth should recover whatever additional funds from Dr. Burke it deems appropriate.

### ***Auditee's Response***

In response to this issue, MassHealth officials provided the following comments:

*As noted in the Draft Audit report ..., MassHealth does have a systems edit in place to identify when a code is billed twice in a 6-month period. Should a comprehensive orthodontic treatment be billed within six-months of a pre-orthodontic consultation visit, the system will generate a report, which triggers a void and recoupment process for the consultation visit. MassHealth has an ongoing quality assurance process aimed at effectively aligning the dental regulations with the system and ensuring that the system edits and processes are operating appropriately.*

*Specifically related to pre-orthodontic treatment visits to Dr. B, where the OSA did not provide MassHealth with the actual documentation in the provider and member records on which the OSA based this finding, we cannot agree to the findings. Again, MassHealth has a very good working relationship with the Medicaid Fraud Division (MFD) and as standard practice refers all appropriate cases to the division.*

### **Auditor's Reply**

As stated in our report, we agree with DentaQuest and MassHealth that a system edit is currently in place within the Dental Program's claims processing system that will deny payment for two pre-orthodontic treatment visits within a six-month period. However, contrary to the assertion of DentaQuest and MassHealth officials, an edit is not in place to recover any fees paid for any pre-orthodontic treatment visit if comprehensive orthodontic treatment begins within six months following the date of service of the pre-orthodontic treatment visit. This is evidenced by the fact that our sample test identified numerous instances of Dr. Burke submitting claims for pre-orthodontic treatment visits that occurred within six-months of planned orthodontic treatments, yet DentaQuest's and MassHealth's edits did not identify and reject these claims. Also as noted above, in the case of Dr. Burke, we found that he took 35,750 periapical 212 FMx and 1994 panoramic radiographs totaling \$707,298 for members under the age of 21 during our audit period, which exceeded the allowable limits established by MassHealth regulations. This fact was clearly evident by the information in the MMIS system which contained all the information necessary to identify this issue and no review of patient records was necessary to make this determination. However, DentaQuest's claims processing system did not include edits to detect and deny claims for radiographs that were improper or violated the limits for these services as established by state regulations.

### **3. DENTAQUEST'S FAILURE TO PROPERLY ADJUST BILLINGS FROM DENTAL PROVIDERS RESULTED IN UNNECESSARY DENTAL PROGRAM COSTS TOTALING AT LEAST \$162,863**

MassHealth's dental providers frequently take multiple bitewing, periapical, and panoramic radiographs on members during routine dental check-ups. Depending upon the type and number of radiographs taken, MassHealth regulations require that these individual radiographs be bundled together and billed by dental providers as one full-mouth series radiograph rather than as individual radiographs. By bundling these radiographs, the Commonwealth's reimbursement to dental providers is approximately 40% less for these services than it would be if it allowed dental providers to bill for these radiographs separately. However, we found that the Dental Program's claims processing system lacked sufficient edits to make sure that

radiographs were appropriately bundled prior to payment. Consequently, we found that one dental provider, Kool Smiles, which had offices in Cambridge, Chelsea, and New Bedford that were included in our sample, regularly submitted claims for bitewing, periapical, and panoramic radiographs, which should have been bundled and billed to MassHealth as one full-mouth radiograph but were instead paid for by MassHealth as separate radiographs. This resulted in unnecessary costs to the Commonwealth totaling \$162,863 during fiscal year 2009 at these three locations alone.

MassHealth regulation 130 CMR 420.423(B)(1) details, among other things, the type and quantity of radiographs that comprise an FMx, and requires bundling of radiographs in order to control program costs. This regulation states, in part:

*Full-Mouth Radiographs (FMx) ... Full mouth radiographs must consist either of a minimum of 10 periapical films and two posterior bitewing films, or two-to-four bitewing films and two periapical films taken with a panoramic film. ...The MassHealth agency does not pay more for individual periapical films (with or without bitewings) than it would for a full-mouth series.*

During our audit, we noted that seven of the 10 dental providers routinely bundled radiographs they took on members and appropriately billed them as an FMx to MassHealth. However, we found that at the three Kool Smiles locations in our sample, the dental providers did not bundle radiographs as required by MassHealth regulations. During our audit, we reviewed 83 member files at these three Kool Smiles locations to determine the extent to which dental claims for radiographic services were processed separately rather than bundled in accordance with MassHealth regulation. Of the files tested, 59 (68.7%) had bundling issues totaling \$3,201. Specifically, the members involved had received multiple radiographs during dental check-ups which, based upon 130 CMR 420.423(B)(1), constitutes an FMx. However, in each instance, the three dental offices in question submitted individual claims for each radiograph taken rather than bundling them into a single FMx claim. In addition, DentaQuest's claims processing system did not have adequate edits in place to detect and correct the bundling problem. For example, one member tested received four bitewings, two periapicals, and a panoramic radiograph on May 14, 2007. Kool Smiles Chelsea, which had taken these radiographs, submitted a separate claim for each totaling \$152. Had DentaQuest correctly bundled the claim, the cost to the Commonwealth would have been \$65 less, or \$87. The table below details the results of our

sample test at Kool Smiles Cambridge, Chelsea, and New Bedford, including the additional \$3,201 paid by the Commonwealth due to DentaQuest's failure to bundle radiographs.

<u>Location</u>	<u>Members</u>	<u>Bitewings</u>	<u>Periapicals</u>	<u>Panoramics</u>	<u>Total Actual Cost</u>	<u>Potential Bundling Cost</u>	<u>Additional Cost</u>
Cambridge	17	\$ 480	\$ 567	\$1,348	\$2,395	\$1,483	\$ 912
Chelsea	20	598	676	1,620	2,894	1,752	1,142
New Bedford	<u>22</u>	<u>599</u>	<u>731</u>	<u>1,734</u>	<u>3,064</u>	<u>1,917</u>	<u>1,147</u>
Total	<u>59</u>	<u>\$1,677</u>	<u>\$1,974</u>	<u>\$4,702</u>	<u>\$8,353</u>	<u>\$5,152</u>	<u>\$3,201</u>

Based on the bundling problem we identified in the sample of member files reviewed at the three Kool Smiles locations, we analyzed every claim submitted by Kool Smiles Cambridge, Chelsea, and New Bedford during fiscal year 2009. Our review found 2,455 instances in which Kool Smiles failed to bundle claims for radiographs that should have been bundled and DentaQuest failed to detect these problems and bundle claims when authorizing payment for these radiographic services. This resulted in additional costs to the Commonwealth totaling \$162,863. Considering that the bundling problem resulted from a systemic deficiency within DentaQuest's claims processing system, and that these numbers reflect the financial impact on the Commonwealth for just three of the over 1,500 participating dental providers that submitted claims during fiscal year 2009, the full extent of the problem could easily have reached millions of dollars over the past four fiscal years. The table below details the results of our expanded tests at Kool Smiles offices located in Cambridge, Chelsea, and New Bedford.

<u>Location</u>	<u>Affected Members</u>	<u>Actual Costs</u>	<u>Potential Bundling</u>	<u>Additional Cost</u>
Cambridge	489	\$75,131	\$43,032	\$32,099
Chelsea	788	119,964	69,432	50,532
New Bedford	<u>1,178</u>	<u>183,896</u>	<u>103,664</u>	<u>80,232</u>
Total	<u>2,455</u>	<u>\$375,991</u>	<u>\$216,128</u>	<u>\$162,863</u>

During our audit, we discussed this matter with officials from Kool Smiles, DentaQuest, and MassHealth. Kool Smiles' Director of Audit Compliance stated that his company sought guidance relative to this matter from DentaQuest and was informed by DentaQuest officials to continue to bill for radiographs individually, whereupon DentaQuest's claims processing system would bundle radiographs as an FMx when deemed appropriate. DentaQuest's Contract Director confirmed that his agency made these comments to Kool Smiles staff but



acknowledged that the edits that would bundle radiographs as necessary to comply with MassHealth regulations were not implemented into the system until May 2010. . MassHealth officials stated that prior to entering into its contract with DentaQuest, MassHealth did not have the capabilities to bundle the radiographs in question, even though this was required by its own regulations.

### ***Recommendation***

As noted above, subsequent to the end of our audit field work, DentaQuest officials stated that they had just implemented edit checks within the dental claims processing system that would bundle the radiographs in question. However, in order to ensure that dental claims for these radiographic services are consistently processed in accordance with MassHealth regulations, we recommend that DentaQuest and MassHealth continue to monitor the effectiveness of these edits and make any modifications necessary to ensure that multiple claims for radiographs, whenever appropriate, are bundled into FMx claims. Also, DentaQuest should fully analyze, to the extent possible, all the claims for these multiple radiographic services that it processed for its dental providers other than those we reviewed, to identify all other instances of overbillings for these services. Based on this analysis, MassHealth should recover the amounts for any additional overbillings identified, including the \$162,863 in overbillings that we found at Kool Smiles Cambridge, Chelsea, and New Bedford.

### ***Auditee's Response***

In response to this issue, MassHealth officials provided the following comments:

*Where the OSA did not provide MassHealth with the actual documentation in the provider and member records on which the OSA based its findings regarding bundling of radiographs, we cannot agree to the findings. We believe that providers may generally be in compliance with the agency's intended application of its regulation. As a safeguard, during the course of the audit as a result of discussions with the OSA, MassHealth implemented systems edits to bundle specific radiographs. MassHealth will review the dental regulations for amendment at the next opportunity to align with the systems edit to specifically state that MassHealth will pay no more for an individual or series of radiographs than it will for an FMX.*

### ***Auditor's Reply***

In its response, MassHealth asserts that because we did not provide it with the actual documentation in the provider and member records on which the OSA based this finding, it cannot agree to the findings. However, as previously noted, throughout our audit process, both

MassHealth and DentaQuest officials were provided with information and actual copies of records to review relative to this issue and based on their review, these officials acknowledged that problems existed for which they could not offer explanations. Further, our findings in this area were largely based on information we obtained from the state's MMIS system, which is available to both MassHealth and DentaQuest. Our patient file reviews were only used to substantiate the issues we identified during our queries of MMIS information. DentaQuest's contract with the Commonwealth requires it to conduct trend analysis of the dental data. If DentaQuest was in fact effectively analyzing this data, we can neither see how this issue could have been overlooked as a potential problem nor how MassHealth can now assert that its dental providers may generally be in compliance with the intended application of its regulations in this area without this analytical information.

Finally, in its response, MassHealth states that it has implemented edits to bundle specific radiographs. We believe such actions were necessary and appropriate but also believe that DentaQuest should conduct periodic analysis of MassHealth's dental payment data to ensure that these X-rays are being appropriately bundled and paid for at the lowest possible cost.

#### **4. DUPLICATE PAYMENTS TOTALING AT LEAST \$2,694 MADE TO DENTAL PROVIDERS**

Our review of 258 member files at the 10 dental providers we audited identified 11 instances totaling \$2,694 in which a dental provider in our sample was paid twice for the same dental procedure. In each case, two claims were found in MassHealth's records, indicating that the same dental procedures were performed on the same member either on the same day or within a few days' time. However, MassHealth's dental claims processing system failed to identify these as duplicate claims.

MassHealth regulation 130 CMR 450.235 defines overpayments for dental services as follows:

*Overpayments include, but are not limited to, payments to a provider (A) for services that were not actually provided... (E) for services for which a provider has failed to make, maintain, or produce such records, prescriptions or other documentary evidence as required... (G) for services billed that result in duplicate payments.*

During our audit, we reviewed the billing information on the claims submitted by the 10 dental providers in our sample and identified 11 duplicate payments that appeared to have been made to eight of the dental providers we audited, as indicated below:

<u>Provider</u>	<u>Member</u>	<u>Check-up: X-Rays</u>	<u>Prophylaxis: Fluoride</u>	<u>Sealants</u>	<u>Amalgam: Crown: Pulpotomy</u>	<u>Total Costs</u>	<u>First Payment</u>	<u>Second Payment</u>
Small Smiles Springfield	10004xxx8	\$ 166	\$ 61	-	-	\$227	12/12/05	12/16/05
Small Smiles Springfield	10002xxx1	144	71	-	-	215	11/27/07	11/29/07
Kool Smiles Cambridge	10002xxx7	163	69	\$180	\$431	843	10/21/06	10/21/06
Holyoke Mall Dental	10002xxx1	70	-	-	-	70	5/5/06	5/22/06
Small Smiles Springfield	10002xxx9	124	61	-	-	185	9/7/05	9/8/05
Small Smiles Springfield	10002xxx9	175	69	-	-	244	8/22/06	8/22/06
Small Smiles Springfield	10003xxx6	166	21	-	-	187	10/14/05	10/14/05
Small Smiles Lawrence	10000xxx7	124	21	-	-	145	1/30/06	1/31/06
Small Smiles Lawrence	10002xxx8	190	69	36	-	295	9/18/06	9/18/06
Small Smiles Worcester	10004xxx8	152	61	-	-	213	12/29/05	12/29/05
Holyoke Mall Dental	10004xxx2	<u>70</u>	-	-	-	<u>70</u>	7/18/05	7/25/05
Totals		<u>\$1,544</u>	<u>\$503</u>	<u>\$216</u>	<u>\$431</u>	<u>\$2,694</u>		

For example, Small Smiles Dental Clinic of Springfield was paid \$215 for preventive and diagnostic dental care (bitewing, periapical, and panoramic radiographs; prophylaxis; and fluoride treatment) performed on a member on November 27, 2007. However, MassHealth's payment records show that Small Smiles Dental Clinic of Springfield received a second \$215 payment for performing the same services to this same member on November 29, 2007. The provider's office manager acknowledged that the member was not treated on November 29, 2007. Moreover, she stated that a clerical error caused the double billing.

During our audit, we discussed these 11 cases with provider officials. In the first four cases detailed in the chart above, officials from these dental offices agreed that the dental procedures in question had been mistakenly billed twice. In the seven remaining cases, provider officials stated that their records indicated that the services in question were billed once and stated that they had no record of having received a second payment. Consequently, in these seven cases, a conflict exists between MassHealth's payment records and the provider's records.

We presented this conflicting information to MassHealth and DentaQuest for explanation. The DentaQuest official with whom we spoke was initially emphatic that system edits were in place to detect and deny such duplicate payments. However, after closely examining several of the cases in question, the DentaQuest official could neither explain how the duplicate payments occurred nor identify the cause of the apparent conflict between MassHealth's payment records and those of the providers for the remaining seven cases.

### ***Recommendation***

In order for MassHealth to avoid making overpayments as described in 130 CMR 450.235, we recommend that DentaQuest and MassHealth collaborate to ensure that MassHealth's dental claims processing system contains edits that effectively identify and deny duplicate claims. Further, MassHealth should investigate the conflicts between its payment records and those of the providers for the seven cases detailed above and determine whether it made duplicate payments to these providers in these instances. Based on its investigation, MassHealth should recover from the dental providers in question any funds involving duplicate payments.

### ***Auditee's Response***

In response to this issue, MassHealth officials provided the following comments:

*MassHealth system edits will deny a claim for the same member, same service, same day, and same provider as a duplicate claim. MassHealth has further enhanced its system edits to deny a claim for the same member, same service, same day, and a different provider working for the same group practice as a duplicate claim. MassHealth has analyzed the claims for providers that worked in the same group practice and has reprocessed any affected claims, as appropriate.*

### ***Auditor's Reply***

As noted in our report, some of the dental providers we visited acknowledged that they had submitted duplicate billings to MassHealth that went undetected. Further, during our audit, we showed DentaQuest officials documentation relative to several duplicate claims that were processed by MassHealth and no explanation was given as to why claims were processed. In its response, MassHealth acknowledges that during our audit period, it did not have edit checks within its claims processing system that would detect different dentists who worked in the same office who billed for the same services for the same patient. Based on its response, the agency has taken some measure to address this problem. However, we again recommend that

DentaQuest and MassHealth collaborate to ensure that MassHealth's dental claims processing system contains edits that effectively identify and deny any duplicate claims. Further, MassHealth should investigate the conflicts between its payment records and those of the providers for the seven cases detailed above and determine whether it made duplicate payments to these providers in these instances. Based on its investigation, MassHealth should recover from the dental providers in question any funds involving duplicate payments.

## APPENDIX

### U.S. Food and Drug Administration Guidelines

#### The Selection of Patients for Dental Radiographic Examination

The recommendations in this chart are subject to clinical judgment and may not apply to every patient. They are to be used by dentists only after reviewing the patient's health history and completing a clinical examination. Because every precaution should be taken to minimize radiation exposure, protective thyroid collars and aprons should be used whenever possible. This practice is strongly recommended for children, women of childbearing age and pregnant women.

Type of Encounter	Patient Age and Dental Developmental Stage				
	Child with Primary Dentition (prior to eruption of first permanent tooth)	Child with Transitional Dentition (after eruption of first permanent tooth)	Adolescent with Permanent Dentition (prior to eruption of third molars)	Adult, Dentate or Partially Edentulous	Adult, Edentulous
<b>New patient*</b> Being evaluated for dental diseases and dental development	Individualized radiographic exam consisting of selected periapical/occlusal views and/or posterior bitewings if proximal surfaces cannot be visualized or probed. Patients without evidence of disease and with open proximal contacts may not require a radiographic exam at this time.	Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images.	Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images. A full mouth intraoral radiographic exam is preferred when the patient has clinical evidence of generalized dental disease or a history of extensive dental treatment.		Individualized radiographic exam, based on clinical signs and symptoms.
<b>Recall patient*</b> with clinical caries or at increased risk for caries**	Posterior bitewing exam at 6-12 month intervals if proximal surfaces cannot be examined visually or with a probe			Posterior bitewing exam at 6-18 month intervals	Not applicable
<b>Recall patient*</b> with no clinical caries and not at increased risk for caries**	Posterior bitewing exam at 12-24 month intervals if proximal surfaces cannot be examined visually or with a probe		Posterior bitewing exam at 18-36 month intervals	Posterior bitewing exam at 24-36 month intervals	Not applicable

**U.S. Food and Drug Administration Guidelines**  
**The Selection of Patients for Dental Radiographic Examination (Continued)**

Type of Encounter	Patient Age and Dental Developmental Stage				
	Child with Primary Dentition (prior to eruption of first permanent tooth)	Child with Transitional Dentition (after eruption of first permanent tooth)	Adolescent with Permanent Dentition (prior to eruption of third molars)	Adult Dentate and Partially Edentulous	Adult Edentulous
Recall patient* with periodontal disease	Clinical judgment as to the need for and type of radiographic images for the evaluation of periodontal disease. Imaging may consist of, but is not limited to, selected bitewing and/or periapical images of areas where periodontal disease (other than nonspecific gingivitis) can be identified clinically.				Not applicable
Patient for monitoring of growth and development	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development		Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development. panoramic or periapical exam to assess developing third molars		Usually not indicated
Patient with other circumstances including, but not limited to, proposed or existing implants, pathology, restorative/endodontic needs, treated periodontal disease and caries remineralization	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring in these circumstances.				

\*Clinical situations for which radiographs may be indicated include but are not limited to:

**A. Positive Historical Findings**

- Previous periodontal or endodontic treatment
- History of pain or trauma
- Familial history of dental anomalies
- Postoperative evaluation of healing
- Remineralization monitoring
- Presence of implants or evaluation for implant placement

**B. Positive Clinical Signs/Symptoms**

- Clinical evidence of periodontal disease
- Large or deep restorations
- Deep carious lesions
- Malposed or clinically impacted teeth
- Swelling
- Evidence of dental/facial trauma
- Mobility of teeth
- Sinus tract ("fistula")

---

**U.S. Food and Drug Administration Guidelines**

**The Selection of Patients for Dental Radiographic Examination (Continued)**

Clinically suspected sinus pathology  
Growth abnormalities  
Oral involvement in known or suspected systemic disease  
Positive neurologic findings in the head and neck  
Evidence of foreign objects  
Pain and/or dysfunction of the temporomandibular joint  
Facial asymmetry  
Abutment teeth for fixed or removable partial prosthesis  
Unexplained bleeding  
Unexplained sensitivity of teeth  
Unusual eruption, spacing or migration of teeth  
Unusual tooth morphology, calcification or color  
Unexplained absence of teeth  
Clinical erosion

***\*\*Factors increasing risk for caries may include but are not limited to:***

1. High level of caries experience or demineralization
2. History of recurrent caries
3. High titers of cariogenic bacteria
4. Existing restoration(s) of poor quality
5. Poor oral hygiene
6. Inadequate fluoride exposure
7. Prolonged nursing (bottle or breast)
8. Frequent high sucrose content in diet
9. Poor family dental health
10. Developmental or acquired enamel defects
11. Developmental or acquired disability
12. Xerostomia
13. Genetic abnormality of teeth
14. Many multisurface restorations
15. Chemo/radiation therapy
16. Eating disorders
17. Drug/alcohol abuse
18. Irregular dental care