MARYLAND HEALTH CARE COMMISSION

Center for Health Information Technology

2007 Dental EDI Review

The *2007 Dental EDI Review* presents an overview of dental electronic data interchange (EDI) in Maryland. EDI has been defined as ". . . the electronic transfer of information, such as electronic media, in a standard format between trading partners. EDI allows entities within the health care system to exchange medical, billing, and other information to process transactions in a manner which is fast and cost effective."[1] COMAR 10.25.09, *Requirements for Payers to Designate Electronic Health Networks*, requires select payers to submit electronic transaction data to the Maryland Health Care Commission (MHCC or Commission) on an annual basis. These regulations also require payers to contract only with MHCC-certified electronic health networks (EHNs), also known as claims clearinghouses.

The *2007 Dental EDI Review* represents MHCC's fourth annual report on dental EDI, and reflects 2006 dental transaction data submitted by 39 private payers, Medicaid, and the seven Medicaid Managed Care Organizations (MCOs).[2] These payers include 14 private payers that offer dental benefits only, and 25 private payers that provide both dental and medical benefits. This review also highlights the top ten dental payers, which represented 87% of the private payer and government dental claim volume. The top ten payers include Aetna, CareFirst, Cigna, Delta Dental, Dental Benefit Providers, Group Dental Service, Guardian Life, MAMSI,[3] MetLife, and United Concordia.

The term "EDI share" is used throughout this review, and represents the percent of claims received electronically. In 2006, private payer dental EDI increased approximately two percentage points to 35%. MCO dental EDI increased about five percentage points to 34%, and Medicaid dental EDI remained the same at roughly 19%. The 2007 EDI payers are listed on the MHCC website, at: http://mhcc.maryland.gov/edi/ediprogress/2007edireview_0108.pdf. Dental payers are designated by an asterisk.

The Administrative Simplification Provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA-AS) included a section establishing standards for electronic health care transactions, code sets, and identifiers to simplify the transmission of electronic health care information between covered entities.[4] The transaction standards, which went into effect in October 2003, defined data elements and formats for health care claims, health plan eligibility, health claim status, claim payment and remittance advice, enrollment and disenrollment in a health plan, referral certification and authorization, and health plan premium.[5]

In May 2007, the National Provider Identifier (NPI) went into effect.[6] The NPI is a standard identifier issued to providers by the Centers for Medicare and Medicaid Services (CMS), which must be included in standard transactions. CMS issued a contingency plan for implementation of the NPI when it became apparent that many payers and providers were not ready to implement the NPI. The NPI contingency plan expired on May 23, 2008. Dental payers have indicated that they have not experienced, nor do they anticipate, any problems with NPI implementation.

EDI is often viewed as the foundation for health information exchange (HIE), which is defined as the mobilization of health care information electronically across organizations within a region or community.[7] HIE can provide the means to make medical and dental information readily available and accessible to both consumers and providers, and is expected to change the way patient information is obtained and used. A Presidential Executive Order in 2004 established the Office of the National Coordinator for Health Information Technology (ONC) within the Department of Health and Human Services. ONC's mission

is to ". . . make wider use of electronic records and other health information technology to help control costs and reduce dangerous medical errors [and]. . . link all health records through an interoperable system that protects privacy as it connects patients, providers and payers, resulting in fewer medical mistakes, less hassle, lower costs and better health."[8]

Many private, state, and federal initiatives are working to implement HIE that primarily focus on the exchange of medical information. The American Dental Association (ADA), as well as the dental community as a whole, is actively participating in national HIE efforts to ensure that dental requirements are included in HIE development.

Maryland Dental Payers

Dental benefits are offered primarily through private payers in Maryland. As shown in Figure 1 below, private payers contributed approximately 91% of the dental claim volume in the State, with the Medicaid MCOs contributing about 8%, and Medicaid roughly 1%. The most recent estimates of dental expenditures were approximately $87 billion in 2005.[9]

Figure 1. 2006 Government and Private Payer Dental Claim Volume

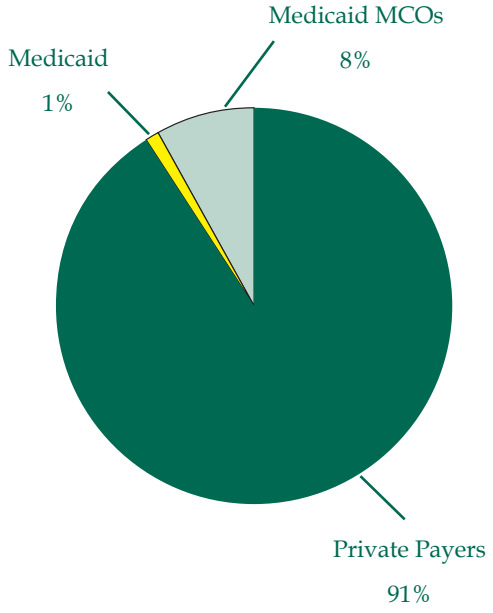
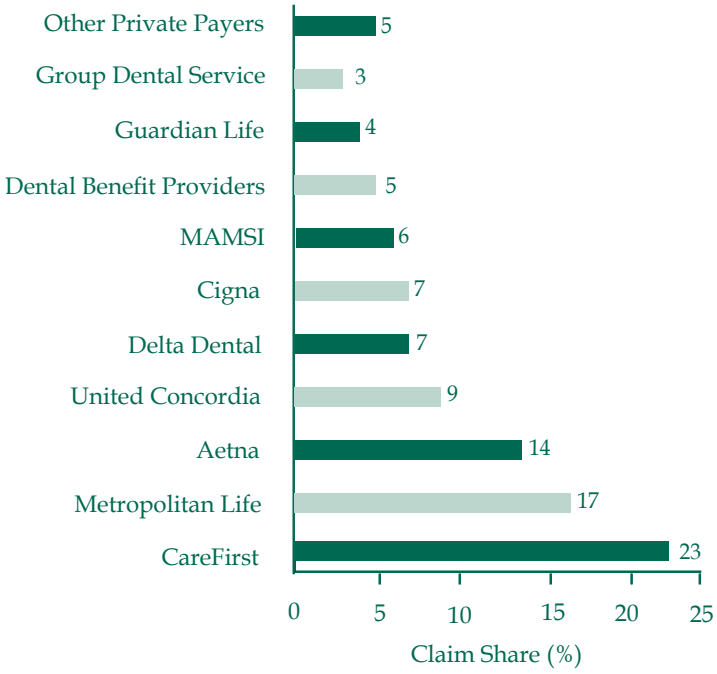


Figure 2 represents the distribution of private payer claim volume. The top ten private payers dominated the dental market, contributing about 95% of the total private payer claim volume. The 29 other private payers contributed approximately 5% of the volume.

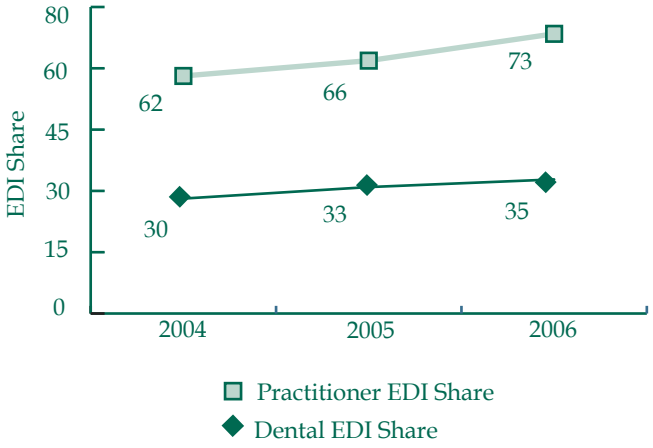
Figure 2. 2006 Private Payer Dental Claim Share



Dental and Practitioner EDI – A Comparison

MHCC has been reporting on dental and practitioner EDI trends for the last ten years.[10] In 2004, MHCC began to report dental EDI trends separately. Figure 3 illustrates the growth of dental EDI from 2004 to 2006, and compares it to the growth of practitioner EDI during this same period. Since 2004, dental EDI has consistently trailed practitioner EDI. Between 2004 and 2005, dental and practitioner EDI increased at roughly the same rate, with practitioner EDI share increasing about four percentage points, and dental EDI share increasing roughly three percentage points. This time period follows

Figure 3. Private Payer Dental and Practitioner EDI Share, 2004 - 2006



the implementation of HIPAA standard transactions in 2003, when medical private payers experienced slower EDI growth due to payers focusing on implementation of the standard transactions. After 2005, medical payers focused more aggressively on EDI expansion, increasing practitioner EDI share about seven percentage points to 73%, while dental EDI share increased only about two percentage points to 35% during this time period.[11]

Generally speaking, practice size affects technology adoption. While most practices use computers for administrative activities, smaller practices tend to submit paper claims. Both medical and dental payers have confirmed that small practices present the greatest challenge to EDI expansion. Dental EDI trails practitioner EDI in part due to differences in dental and practitioner practice size. In 2004, solo dentists (those who worked in a practice with no other dentists) comprised about 63% of all practices; approximately 21% worked with one other dentist, and about 16% with two or more dentists.[12] In contrast, only about 33% of physicians worked either in solo practice or practiced with one other physician.[13]

Dentists perceive fewer advantages to investing in EDI because of the number of patients that do not have dental insurance or have minimal dental coverage.[14] In 2004, 35% of the population lacked either public or private dental coverage, compared to about 17% of the population without medical coverage.[15] It is estimated that nearly 44% of dental expenditures were paid out-of-pocket in 2006, compared to about 10% for all practitioner services.[16] The combination of fewer patients with dental coverage and higher out-of-pocket expenses results in a reduction in the number of claims that are submitted to payers. For the most part, smaller claim volumes minimize the incentive for dentists to submit claims electronically, which may account for the differences between medical and dental EDI.

Top Ten Maryland Dental Payers

The top ten Maryland dental payers reported approximately 95% of the 2006 dental claims. These payers represent regional dental payers, which provide benefits within the Baltimore-Washington metropolitan area, and national dental payers. As shown in Table 1, six of the seven national dental payers reported higher EDI shares than their regional counterparts in both 2005 and 2006. National payers generally have reported more targeted EDI strategies than regional payers.

Table 1. Private Payer EDI Share, 2005 & 2006

Payer	EDI Share %		Claim Share (%)
	2005	2006	
Regional Dental Payers			
CareFirst	20	19	23
Group Dental Service	25	26	3
MAMSI	27	28	6
National Dental Payers			
Aetna	40	44	14
Cigna	40	42	7
Delta Dental	42	42	7
Dental Benefit Providers	15	20	5
Guardian Life	36	37	4
MetLife	50	53	17
United Concordia	29	29	9
All Private Payers	**33**	**35**	

MetLife continues to achieve the highest EDI share among the top ten payers with approximately 53% of its Maryland dental claims received electronically. MetLife attributes its success to an extensive EDI outreach program; MetLife also provides a web-based portal for direct data entry of claims. Dental Benefit Providers reported a 20% EDI share, one of the lowest of both national and regional dental payers. Dental Benefit Providers does not have an EDI outreach initiative in place, which likely accounts for their small share of electronic claims.

CareFirst, the largest dental payer in Maryland with about 23% of the claim share, reported an EDI share of about 19%. Emdeon, CareFirst's dental EHN, transmits electronic dental claims to CareFirst where they are subsequently printed and optically scanned into their claim adjudication system. In 2008, CareFirst will initiate a project to enable acceptance of electronic claims directly into their adjudication system.

Maryland and National Private Payers – A Comparison

The National Dental EDI Council (NDEDIC) is an organization that represents dental stakeholders to promote EDI, offer dental EDI education opportunities, and track and report on the progress of dental EDI nationally.[17] NDEDIC encourages dentists to adopt EDI as a way to reduce administrative costs, increase the accuracy and efficiency of claim submission, and shorten the payment cycle.[18] NDEDIC surveys dental payers to obtain information on their EDI performance, and recently released the *Summary of 2007 Payers Survey*,[19] which reported on 2006 dental EDI using information submitted by approximately 45% of the private dental payers. Table 2 looks at dental EDI share between 2003 and 2006, and compares dental EDI in Maryland with NDEDIC's national survey results, with the exception of 2005 when NDEDIC did not conduct the survey.

Table 2. Maryland and National Dental EDI Share, 2003 - 2006

Year	EDI Share (%)	
	Maryland	National
2003	26	35
2004	30	36
2005	33	--
2006	35	48

Maryland Medicaid MCOs

The seven Medicaid MCOs -- AmeriChoice, AMERIGROUP, Coventry Healthcare Diamond Plan, Jai Medical Systems, Maryland Physicians Care, Medstar Family Choice, and Priority Partners -- participate in the Maryland HealthChoice program and provide benefits under capitated contracts to eligible Medicaid recipients. About 75% of Maryland Medicaid recipients, primarily those recipients who are under 65 years of age and non-institutionalized, receive services through HealthChoice.[20] The MCOs are required to provide dental benefits for children under the age of 21. Coverage for adult dental services is optional, but all of the Maryland MCOs have opted to offer adult dental benefits.[21]

Doral Dental provides dental benefits administration services for five of the seven MCOs: AMERIGROUP, Priority Partners, Maryland Physicians Care, MedStar Family Choice, and Coventry Healthcare Diamond Plan. The non-Doral MCOs, AmeriChoice and Jai Medical Systems, process their own dental claims. As shown in Table 3, Doral has been more successful growing MCO dental EDI than the non-Doral MCOs. With the exception of Coventry Healthcare Diamond Plan, the EDI share of the Doral MCOs exceeds the non-Doral MCOs. Coventry Healthcare Diamond Plan did not report any

EDI due to their small volume of dental claims. Dental services for AmeriChoice enrollees are provided by Dental Benefit Providers.[22] As discussed previously in this review, Dental Benefit Providers is not actively promoting EDI to their dental network providers. Jai Medical Systems administers its own dental services and has limited EDI capabilities at this time.[23]

Table 3. 2006 Maryland Medicaid MCO EDI Share

MCO	EDI Share (%)	MCO Volume Share (%)
AMERIGROUP	32	31
Coventry Healthcare Diamond Plan	0	1
Maryland Physician Care	42	17
MedStar Family Choice	40	5
Priority Partners	43	25
Doral Dental MCO's	38	79
AmeriChoice	21	20
Jai Medical Systems	0	1
All MCOs	**34**	**100**

Auto Adjudication of Claims

Auto adjudicated claims are claims that payers receive electronically and process without manual intervention. Payers are interested in increasing the number of auto adjudicated claims because they can be processed more quickly with fewer claims processors, thereby reducing administrative costs. Both medical and dental payers cite faster reimbursement to promote provider adoption of EDI.

Table 4 illustrates the auto adjudication rates of the four top ten private payers offering only dental benefits, and the remaining six top private payers offering dental and medical benefits. It also compares the level of auto adjudication of dental-only private payers as a whole with the dental and medical private payers. Dental-only payers reported higher auto adjudication rates of about 72%, while dental and medical payers reported roughly 65%. The difference may be attributed to the variation in dental technology investment between medical and dental payers and dental-only payers.

Table 4 also compares auto adjudication rates with EDI share. While many payers strive to increase their auto adjudication rates in order to maximize efficiencies from EDI, some payers have achieved high auto adjudication rates for other reasons. For example, Dental Benefits Providers, with the highest auto adjudication rate of roughly 96%, has a relatively low EDI share of only about 20%. Dental Benefits Providers established stringent turnaround times on claims processing to minimize their liability for interest payments on aged claims.

Table 4. Top Ten Private Payer Auto Adjudicated Claim, 2006

Top Ten Payer	Auto Adjudicated Claims (%)	EDI Share (%)
Dental Only		
Delta Dental	52	42
Dental Benefit Providers	96	20
Group Dental Service	68	26
United Concordia	89	29
Dental and Medical		
Aetna	86	44
CareFirst	0	19
Cigna	67	42
Guardian Life	78	37
MAMSI	52	28
Met Life	81	53
All Dental-Only Payers	**72**	**31**
All Dental & Medical Payers	**65**	**36**
All Private Dental Payers	**66**	**35**

Real-Time Adjudication

Several dental payers are exploring real-time claims adjudication (RTA) as a way to promote EDI. Real-time claims adjudication can be defined as a process in which a provider submits a claim to a payer and the claim is adjudicated before the patient leaves the provider's office.[24] RTA has also been interpreted as providing information about patient liability at the time services are rendered. RTA carries many different meanings in many different contexts and environments.

Payers currently supporting RTA only offer providers a web portal through which claims are entered one at a time. Most practice management systems format electronic claims as a batch file, whereby information for multiple patients is formatted and consolidated into a single file that can be submitted electronically. In order to take advantage of RTA, providers would need to enter claim information twice, once on the web portal, and again in the practice management system.[25] At the October 2007 annual meeting of the American Dental Association (ADA), the Council on Dental Practice approved a resolution to monitor RTA developments, encourage third-party carriers to adopt RTA, educate dentists on its value, and encourage the development of RTA standards.[26]

Dental HIE - National Efforts

The American Dental Association has taken an active role in national HIE activities. In 2001, the ADA Standards Committee on Dental Informatics (ADA SCDI) was formed to ". . . promote patient care and oral health through the application of information technology . . . to develop standards, specifications, technical reports, and guidelines for: components of a computerized dental clinical workstation; electronic technologies used in dental practice; and interoperability standards for different software and hardware products, which provide a seamless information exchange throughout all facets of healthcare."[27]

In 2005, the ADA established a National Health Information Infrastructure (NHII) task force to position itself ". . . as the advocate for dentistry in all appropriate NHII activities."[28] More recently, the ADA established the Electronic Health Record (EHR) Workgroup (Workgroup) ". . . to ensure that the unique character of dental practice is understood and maintained in the dental components of the electronic health record as the government moves this initiative forward."[29] The Workgroup will oversee ADA activities as the dental components of the EHR are developed. The Workgroup will also monitor and supervise activities related to development of the Systematized Nomenclature of Dentistry (SNODENT), the vocabulary designed for electronic dental records and dentistry diagnostic codes.

The MHCC Certified EHN Program

Electronic health networks (EHNs) are entities that process or facilitate the processing of electronic health care transactions. EHNs play a critical role in EDI, facilitating the exchange of transactions between providers and payers. MHCC certifies EHNs conducting business in the State through the regulatory authority set forth under COMAR 10.25.07, *Certification of Electronic Health Networks and Medical Care Claims Clearinghouses*. MHCC partners with the Electronic Health Network Accreditation Commission (EHNAC), a national accreditation organization, to ensure that networks operating in Maryland meet industry best practice standards related to privacy and confidentiality, technical performance, business practices, physical and human resources, and security.

In 2007, the Commission granted MHCC EHN certification to ten additional networks, for a total of 32 MHCC-certified EHNs. Currently, seven EHNs offer dental transaction services, including ACS EDI Gateway, Affiliated Network Services, Henry Schein Practice Solutions, Emdeon Business Services, EDI Health Group, Kodak Dental Systems, and Tesia PCI. A complete list of MHCC-certified networks, as well as those in candidacy status, can be found on the Commission's website at: mhcc.maryland.gov/edi/ehn/index.html.

MHCC's Center for Health Information Technology - Initiatives

There are a number of federal and state initiatives to promote the exchange of health information. In the coming year, MHCC's Center for Health Information Technology (Center) is working with the health care community to increase EDI and health information technology (HIT) awareness and adoption. Some of the Center's activities include:

- Planning and implementing a statewide HIE;
- Identifying challenges to HIT adoption and use, and formulating solutions and best practices for making HIT work;
- Increasing the availability and use of standards-based HIT through consultative, educational, and outreach activities;
- Promoting and facilitating the adoption and optimal use of HIT for the purposes of improving the quality and safety of health care;
- Harmonizing service area HIE efforts throughout the state;
- Promoting the adoption of EDI; and
- Certifying EHNs.

The Center's national involvement in HIE policy and technology development is expected to continue to play a role in advancing dental HIT throughout Maryland.

Endnotes

[1]45 CFR Parts 160 and 162, August 17, 2000.
[2]Payer data is self-reported; it is not audited by MHCC. The seven Medicaid MCO's include AmeriChoice, AMERIGROUP, Coventry Healthcare Diamond Plan, MedStar Family Choice (formerly Helix Family Choice), Jai Medical Systems, Maryland Physicians Care, and Priority Partners.
[3]MAMSI was acquired by United Healthcare in 2004, but MAMSI products continue to be offered and supported on MAMSI platforms. MAMSI refers to Optimum Choice, M.D.IPA, and MAMSI Life and Health Insurance Co.
[4]45 CFR Part 162, January 23, 2004.
[5]45 CFR Parts 160 and 162, August 17, 2000.
[6]745 CFR Part 162, January 23, 2004.
[7]eHealth Initiative, Connecting Communities Toolkit, Washington, D.C.
[8]HHS web page, Health Information Technology, Office of the National Coordinator: Mission, http://www.hhs.gov/healthit/onc/mission/.
[9]John P. Somers, *Dental Expenditures in the 10 Largest States, 2004, Statistical Brief #156*, January 2007, Agency for Healthcare Research and Quality, available at: http://www.meps.ahrq.gov/mepsweb/data_files/publications/st156/stat156.pdf.
[10]The EDI Progress Report form defines practitioners as health care professionals, including freestanding labs, radiology centers, or clinics, typically submitting an 837P or CMS-1500.
[11]Maryland Health Care Commission, *2007 Practitioner and Hospital EDI Review*, March 2008, p. 2.
[12]American Dental Association, *2005 Survey of Dental Practice*, available on the ADA website at: http://www.ada.org/ada/prod/survey/faq.asp.
[13]Center for Health Systems Change, *Physicians Moving to Mid-Sized, Single-Specialty Practices, Tracking Report 18*, http://www.hschange.com/CONTENT/941/.
[14]U.S. Department of Health and Human Services, Medical Expenditure Panel Survey, *Dental Use, Expenses, Dental Coverage, and Changes, 1996 and 2004*, http://www.meps.ahrq.gov/mepsweb/data_files/publications/cb17/cb17.pdf.
[15]John P. Somers, *Dental Expenditures in the 10 Largest States, 2004, Statistical Brief #156*, January 2007, Agency for Healthcare Research and Quality.
[16]Aaron Catlin, et al., *National Health Spending in 2006: A Year of Change for Prescription Drugs,* Health Affairs, January - February 2008.
[17]Information from the National Dental EDI Council website, available at: www.ndedic.com.
[18]*Tips on Electronic Claim Submission*, NDEDIC, available on the NDEDIC website at: http://www.ndedic.com/home/Portals/0/Publications/Tips_Brochure_-_NEW.pdf.
[19]*Summary of 2007 Payers Survey*, NDEDIC, 2007.
[20]Maryland Department of Health and Mental Hygiene, http://www.dhmh.state.md.us/mma/healthchoice/index.html.
[21]Maryland Department of Health and Mental Hygiene, Office of Health Services, Outreach and Care Coordination.
[22]Dental Benefit Providers and AmeriChoice are both United Health Group companies.
[23]Jai Medical Systems reported hospital EDI for the first time in 2006. See the 2007 Practitioner and Hospital EDI Review, p. 4.
[24]American Dental Association, Resolution 18H, Council on Dental Practice, http://www.flouridation.com/members/ada/governance/hod/reports/supp_cdp_01.pdf.
[25]Ken Terry, *Real-time payment: What's holding it back?* Medical Economics, December 7, 2007.
[26]American Dental Association, Resolution 18H.
[27]American Dental Association, *About the ADA Standards Committee on Dental Informatics* (ADA SCDI), available on the ADA website at: www.ada.org/prof/resources/standards/informatics_about.asp.
[28]American Dental Association, Current Policies, Adopted 1954-2006, p. 182, available on the ADA website at: www.ada.org/prof/resources/positions/doc_policies.pdf.
[29]Arlene Furlong, *Creating the dental piece of the EHR*, ADA News, August 23, 2007.

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