MARYLAND HEALTH CARE COMMISSION

2006 Dental Health Information Exchange Review

The *2006 Dental Health Information Exchange Review* provides an overview of dental electronic data interchange (EDI) in Maryland. EDI refers to the computer-to-computer exchange of business data in standard formats. In health care, EDI refers to the exchange of administrative health care information. Health Information Exchange (HIE) incorporates the exchange of clinical health care information, and refers to the mechanism by which electronic health information can be exchanged.

Nationally, dental expenditures for 2005 have been estimated at about $87 billion, comprising almost 14% of total professional health services. In 2004, private insurance covered approximately 43% of both dental and medical expenditures. Dental out of pocket costs, however, represented roughly 48% of expenditures, while medical out of pocket expenditures were only about 19%.[1]

As required by State regulations, 35 private payers and seven Medicaid Managed Care Organizations (MCOs) submitted 2005 administrative dental transactions to the Maryland Health Care Commission (MHCC or Commission). The 35 private payers included 12 payers offering dental benefits only. In 2005, dental EDI continued to trail medical EDI, with electronic claims comprising only about 33% of total claims, compared to approximately 73% for medical practitioners. The following information is intended to provide readers with an informative perspective on dental EDI through an analysis of administrative transactions by public and private payers.

Dental EDI

## The Maryland Dental Payers
Figure 1.   2005 Dental Claim Volume - All Payers
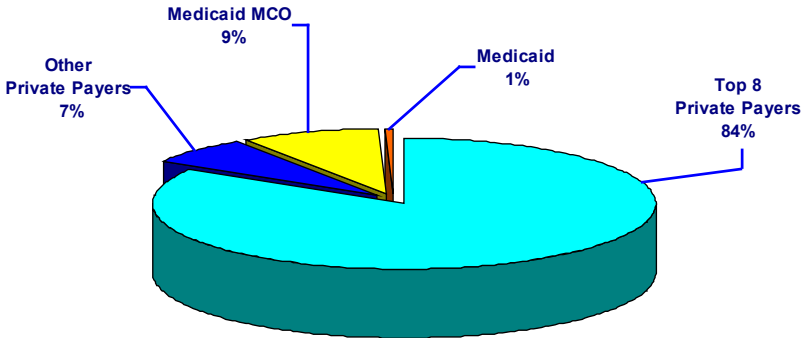
🦷 The Top 8 private dental payers -- Aetna, CareFirst, Cigna, Delta Dental, Guardian, Met Life Dental, United Concordia, and United Healthcare/ MAMSI   represented about 84% of the total 2005 dental claim volume in the state, as shown in Figure 1.   The seven MCOs participating in Maryland Medicaid's HealthChoice program -- AmeriChoice, AmeriGroup, Coventry Diamond Plan, Helix Family Choice, Jai Medical, Maryland Physicians Care, and Priority Partners, also submitted dental claims data.   The MCOs represented roughly 9% of the total claim volume, surpassing the 7% contributed as a whole by the 27 Other Private Payers.

🦷 As shown in Figure 2, CareFirst continued to dominate the Maryland dental market in 2005, reporting approximately 24% of the private payer claim volume.   The distribution of claims among the private payers remained virtually unchanged compared to 2004.[2]   The Top 8 private payers collectively contributed almost 93% of the private payer claim volume.

Figure 2.   2005 Dental Claim Volume - All Payers
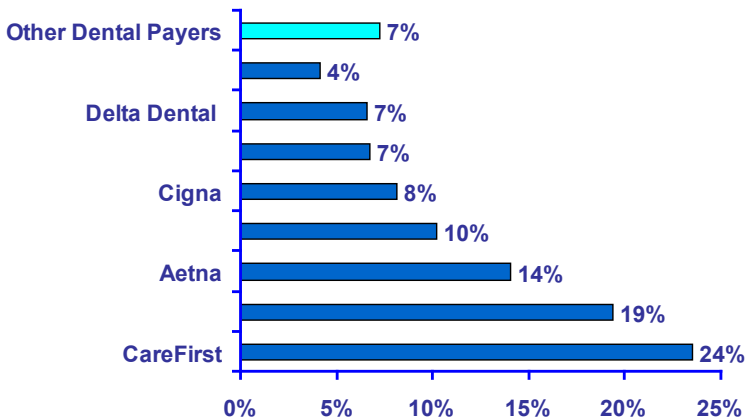
Dental EDI Continues to Trail Physician EDI

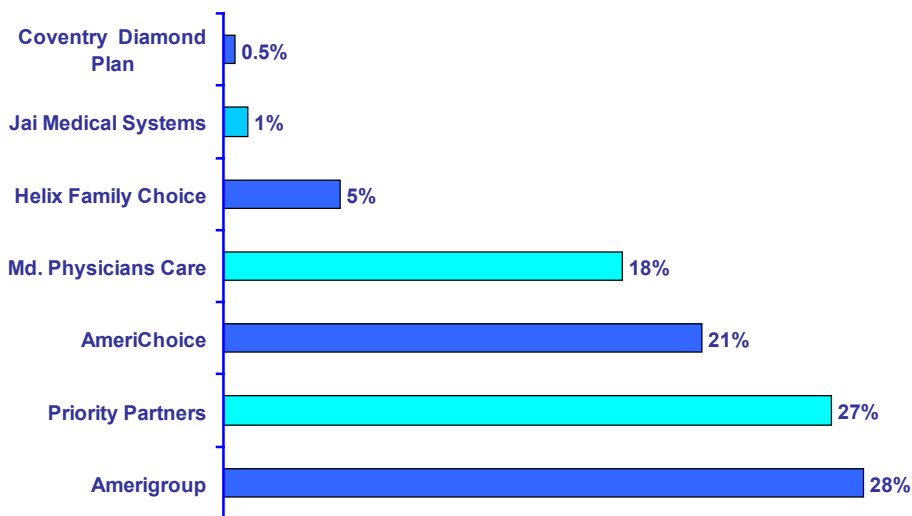### Figure 3. 2005 Private Payer Dental & Physician EDI Share
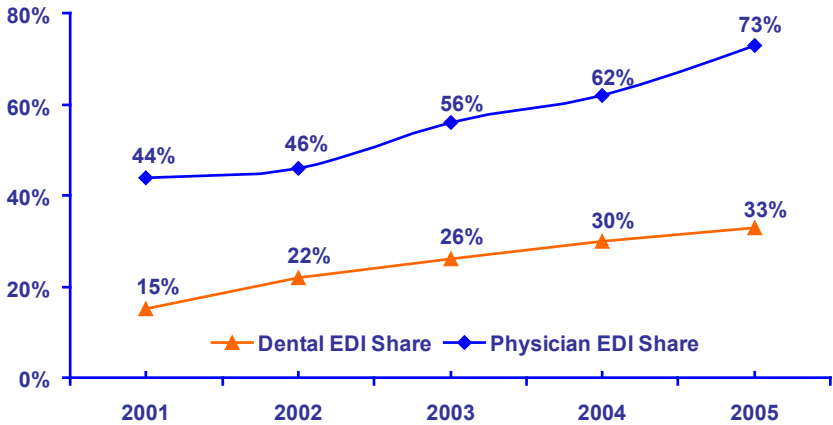
EDI share is a term that describes the percent of claims received electronically. Claims received electronically include those received as an electronic file or batch, as well as claims that are submitted through direct data entry on payer-sponsored websites. Payers contract with electronic health networks (EHNs), also known as claims clearinghouses, to provide the connectivity between payers and providers. Several EHNs offer providers connectivity to payers using either electronic batch file, direct data entry, or both.[3]

Figure 3 shows that dental EDI share increased to about 33% in 2005, but has consistently trailed physician EDI share. In addition, dental EDI increased at a slower rate. Between 2004 and 2005, dental EDI share increased about 4 percentage points, while physician EDI share increased approximately 11 percentage points. Approximately 75% of dentists are solo practitioners,[4] compared to about 33% of physicians.[5] Solo practices with smaller claim volumes present considerable challenges to all payers promoting EDI. The larger percentage of solo dental practices adds to the challenge, and may be part of the reason dental EDI is less than physician EDI.

The last survey conducted by the National Dental Electronic Data Interchange Council (NDEDIC)[6] reported a 36% national dental EDI share in 2004. While Maryland EDI share increased to 33% in 2005, the State did not meet the 2004 national EDI levels.

Maryland Medicaid MCOs

Figure 4. 2005 Share of Total MCO Dental Claims

MCO	Share
Coventry Diamond Plan	0.5%
Jai Medical Systems	1%
Helix Family Choice	5%
Md. Physicians Care	18%
AmeriChoice	21%
Priority Partners	27%
Amerigroup	28%

- The MCOs in Maryland's Medicaid HealthChoice program provide dental benefits to eligible pregnant women and children. Some MCOs may provide additional dental benefits to their members.

- Collectively, the seven MCOs contributed roughly 9% of the total dental claim volume in 2005.

- As shown in Figure 4, AmeriGroup represented the majority MCO share, with about 28% of MCO claims, while Coventry Diamond Plan, the last MCO to begin participating in the HealthChoice program, had the smallest share of about 0.5%.

Maryland Medicaid MCO Dental EDI

🦷 Dental services for AmeriGroup, Coventry Diamond Plan, Helix Family Choice, Maryland Physicians Care, and Priority Partners, are provided by Doral Dental. The members of these MCOs utilize Doral dental providers and those providers submit claims to Doral for payment. AmeriChoice partners with Dental Benefit Providers,[7] and Jai Medical manages its own dental benefits.

🦷 As shown in Table 1, the EDI share of Doral Dental MCOs collectively exceed that of the other MCOs, as well as the 33% EDI share of the private payers. MCO EDI data was not defined and reported consistently by Doral, which accounts for some of the variation in EDI share among these MCOs. Doral has indicated that it will be consolidating data reporting for the 2006 EDI data collection in order to provide more consistent data. AmeriGroup did not begin using Doral services until the latter part of 2004, which may account for its smaller EDI share. Coventry's minimal dental claim volume (0.5% of MCO claims) likely accounts for the absence of any electronic dental claims. Jai Medical is currently beginning to accept electronic institutional claims. It will likely take some time before it is able to receive dental claims electronically.

Table 1. 2005 Maryland Medicaid MCO EDI Share

| MCO	% EDI
Maryland Physicians Care	41%
Priority Partners	36%
Helix Family Choice	35%
AmeriGroup	26%
Coventry Diamond Plan	0%
ALL DORAL DENTAL MCOs	**34%**
AmeriChoice	21%
Jai Medical	0%
ALL MCOs	**29%**

National Payers Continue to Lead in Dental EDI

- In 2005, the major national payers continued to surpass the top local payers in the percent of electronic claims received, as illustrated in Table 2. Met Life continues to surpass the other payers with an EDI share of about 50%. Met Life conducts EDI outreach programs and forums, encourages electronic submissions when enrolling dentists, and offers a web-based portal for direct entry of claims. They also find that younger dentists have greater interest in electronic submissions.

- MAMSI demonstrated a higher rate of EDI growth than the national payers, increasing nine percentage points in 2005. MAMSI initiated a dental EDI promotion with its dental EHN, Affiliated Network Services (ANS), offering a no charge incentive program for electronic submitters.

- CareFirst is the largest dental payer in Maryland, with about 24% of the dental claim volume. CareFirst, however, cannot receive electronic dental claims. Emdeon, the CareFirst dental EDI vendor, accepts CareFirst electronic claims from providers and forwards them to CareFirst. CareFirst then prints the claims and optically scans thems into its system.

- The other major payers reported modest EDI gains. United Concordia's EDI share remained essentially flat. While corporate reorganization diverted some of its EDI expansions programs, United Concordia anticipates EDI gains in the future. The expansion of web-based direct data entry capabilities was cited by several payers as contributing to an increase in EDI.

Table 2. Private Payer Electronic Claims 2003 - 2005

Dental Payer	% Electronic Claims		% Claim Volume
	2004	2005	
LOCAL PAYERS			
MAMSI	18%	27%	7%
CareFirst	15%	20%	24%
NATIONAL PAYERS			
Met Life	46%	50%	19%
Delta Dental	Did Not Report	42%	7%
Cigna	38%	40%	8%
Guardian	36%	36%	4%
Aetna	32%	35%	14%
United Concordia	28%	29%	10%
ALL PRIVATE PAYERS	29%	33%	

Auto Adjudication of Claims - The Promise of EDI

Figure 5. 2005 Auto Adjudication
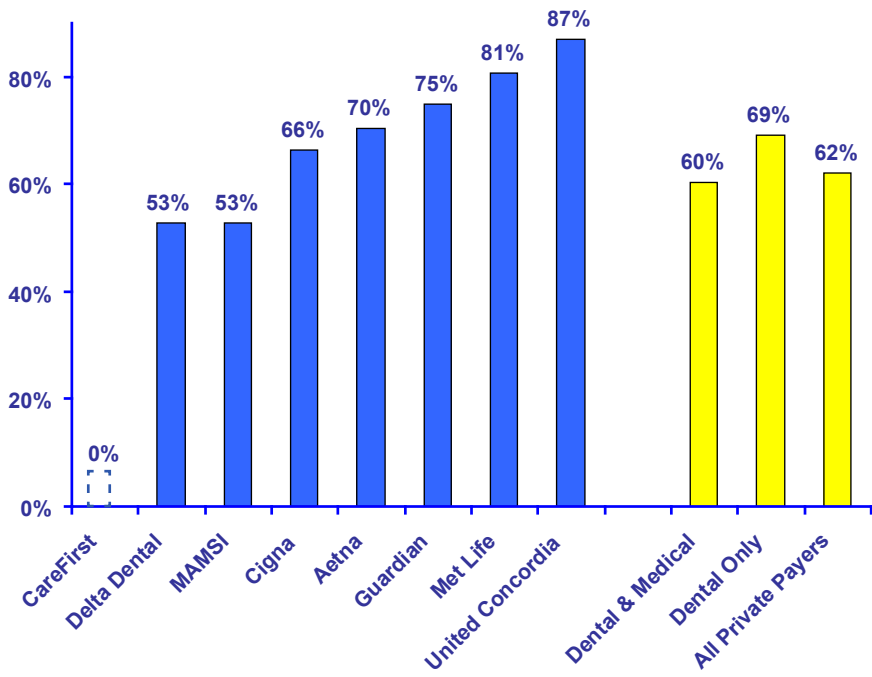
An auto adjudicated claim is one that is received electronically, does not encounter any edits, and can be processed without manual intervention. Auto adjudicated claims are able to be paid more quickly. Since electronic claims, whether sent as a batch file or via website direct data entry, typically have many data errors resolved prior to transmission, electronic claims are cleaner on arrival. They are more likely to avoid many of the edits that paper claims encounter, resulting in faster payment.

- ♥ Payers have improved their auto adjudication rates by analyzing claim edits and streamlining claim adjudication processes. Figure 5 illustrates the 2005 auto adjudication rates of the major private payers, comparing dental-only payers vs. payers that reported both dental and medical claims.

- ♥ United Concordia reported the highest auto adjudication rate of approximately 87%. CareFirst, which has the largest share of claims, is unable to auto adjudicate them electronically.

Dental Electronic Health Records and Health Information Exchange

Many federal, private sector, state, and regional health information initiatives are underway to promote health information exchange. EDI has provided the foundation for this exchange through the development of comprehensive standards to facilitate the exchange, integration, sharing, and retrieval of electronic health information.[8] In 2004, the Bush administration issued an Executive Order establishing the Office of the National Coordinator for Health Information Technology (ONC) under the United States Department of Health and Human Services (HHS) to develop and implement an interoperable National Health Information Infrastructure (NHII) to exchange health information. The importance of dental participation in HIE was noted by HHS Secretary Michael Leavitt in an address to the 2006 American Dental Association (ADA) House of Delegates. "If we don't have a picture of the dental record with the rest of the medical record, we have an incomplete record.[9] An August 2006 Presidential Executive Order mandated the promotion of quality and efficient delivery of health care in Federal government administered or sponsored health programs through the use of health information technology.[10] Several federal health programs have responded with both medical and dental HIE initiatives. The Indian Health Service announced that an electronic dental record will be integrated into an existing electronic health record (EHR) in 2007.[11] The Department of Defense will begin implementing a dental record component of its EHR in April 2007.[12]

The ADA has taken a proactive approach to ensure that dental requirements and issues are represented and addressed within national HIE initiatives and standards development organizations (SDOs). In 2001, the ADA established an NHII Task Force ". . . to provide strategic planning and direction to the ADA allowing for dentistry's integration in the development of an interoperable national information infrastructure that includes the electronic health record."[13] In addition, the ADA Standard Committee on Dental Informatics (ADA SCDI) was formed 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."[14] The ADA is an American National Standards Institute (ANSI) accredited SDO, and is a voting member of the DICOM Standards Committee representing dentistry.[15] Several relevant dental HIE initiatives include:

National Dental HIE Initiatives

- Publication of *ANSI/ADA Spec. No. 1047-2006 Standard Content of an Electronic Periodontal Attachment*, developed by the ADA SCDI. Periodontal claims usually require additional documentation. This standard will enable dentists to submit that documentation electronically.[16]

- Release of *ADA Technical Report No. 1023 — Implementation Requirements for DICOM in Dentistry: 2005*, a technical specification based on the DICOM version 3 Standard as it applies to dentistry to increase interoperability between digital radiographic systems. Several dental practice management vendors have participated in the development and testing of this standard, and the ADA encourages dentists to confirm DICOM conformance with their vendors.[17]

- ADA SCDI participation on development of a dental extension to the ASTM Continuing Care Record (CCR) standard specification. The CCR defines a core set of facts about a patient's healthcare, which can be transmitted on paper or electronically. Data sets for extensions that address requirements for different clinical specialties are being developed, including dental.[18]

- Initial formation of an ADA SCDI initiative to develop a standard ante-mortem dataset for use in forensic post-mortem discovery.[19]

In the coming year, MHCC will continue to work with dentists and leading dental associations to increase awareness and adoption of health information technology in an effort to improve both administrative efficiencies and the quality of care. MHCC's national involvement in HIE policy and technology development is expected to continue to play a role in advancing dental HIE throughout Maryland.

MHCC Certified Electronic Health Network Program

Under COMAR 10.25.07, the Maryland Health Care Commission certifies electronic health networks (EHNs) conducting business in the state. The certification program, in partnership with EHNAC (a national EHN accreditation organization), requires EHNs to meet industry best-practice standards related to technical performance, privacy and confidentiality, business practices, security and resources. The MHCC-certified and candidate EHNs supporting dental EDI include: ANS, EDI Health Group, Emdeon, Gateway EDI, Henry Schein Practice Solutions, Kodak Dental Systems, MedAvant, Payerpath, and Tesia-PCI.

2006 Dental Health Information Exchange Review Reporting Payers

Private Payers	
Aetna	Alta Health
American Family Life Assurance*	American Medical Security Life
American Republic Insurance	Ameritas Life Insurance*
CareFirst	Cigna
Companion Life Insurance*	Coventry Health Care
Delta Dental Insurance*	Dental Benefit Providers*
DentaQuest Mid-Atlantic*	Educators Mutual Life Insurance
Elder Health	Fidelity Insurance
First Health Life & Health	GE Group Life Assurance*
Golden Rule Insurance	Graphic Arts Benefits
Great-West Life & Annuity*	Group Dental Services of MD*
Guardian Life Insurance	Humana Dental Insurance*
Lincoln Financial Group*	MAMSI
Mega Life & Health Insurance	Metropolitan Life Insurance
New England Life Insurance	New York Life Insurance
Principal Mutual Life Insurance	Unicare Life & Health Insurance
Unimerica Insurance	Union Labor Life Insurance
United Concordia*	*Dental Only Payers
Medicaid Managed Care Organizations	
AmeriChoice	AmeriGroup
Coventry Healthcare Diamond Plan	Helix Family Choice
Jai Medical Systems	Maryland Physicians Care
Priority Partners	

Endnotes

[1] John P. Somers, *Dental Expenditures in the 10 Largest States, 2004*, Statistical Brief #156, January 2007, Agency for Healthcare Research and Quality.

[2] *2005 Dental EDI Review*, April 2006, Maryland Health Care Commission.

[3] Under COMAR 10.25.07, MHCC certifies EHNs operating in Maryland. Information about the MHCC EHN certification program, and a complete listing of MHCC-certified EHNs, is located on the MHCC website at: http://mhcc.maryland.gov/edi/ehn.

[4] *2004 Survey of Dental Practice*, ADA Survey Center.

[5] *Two hands are better than one: Multi-physician practices improve heart patients' outcomes*, Health Management and Policy, January 17, 2007.

[6] NDEDIC is a national organization of dental stakeholders dedicated to promoting dental EDI (www.NDEDIC.org).

[7] AmeriChoice and Dental Benefit Providers are subsidiaries of United Health Group.

[8] An overview of EDI and HIE can be found in the *2006 Health Information Exchange Review*, Maryland Health Care Commission, January 2007.

[9] Judy Jakush, *Health standard setting: 'If the DDSs don't do it, the MBAs will', HHS Secretary Leavitt addresses the ADA House of Delegates*, ADA News, Oct. 20, 2006.

[10] *Executive Order: Promoting Quality and Efficient Health Care in Federal Government Administered or Sponsored Health Programs*, Office of the Press Secretary, August 22, 2006.

[11] Sandra Basu, *New HIS Dental Record Will Boost Patient Care Through Enhanced Functions, Officials Say*, July 2006, U.S. Medicine, July 2006.

[12] *Military to Automate Dental Records*, Health Data Management Government News Portal, March 20, 2007.

[13] *Report of the National Healthcare Information Infrastructure (NHII) Task Force to the House of Delegates: Update on Task Force Activities*, October 2006.

[14] *About the ADA Standards Committee on Dental Informatics (ADA SCDI)*, American Dental Association website, www.ada.org.

[15] Digital Imaging and Communications in Medicine (DICOM) is a global IT standard for exchanging digital information to ensure interoperability.

[16] Arlene Furlong, *First attachment standard for electronic claims published*, ADA News, posted Aug. 21, 2006.

[17] Arlene Fulong, *DICOM promotes digital X-ray standards*, ADA News, posted Nov. 23, 2005.

[18] *Work Item Summary, WK 4363 New Standard Specification for the Continuity of Care Record (CCR)*, ASTM International website, www.astm.org. ASTM is an SDO that develops technical standards for materials, products, systems, and services.

[19] Conversation with Norman Schreiber, Chairman SCDI Subcommittee 10 for Dental Informatics Architecture and Devices, March 28, 2007.

MARYLAND
HEALTH CARE
COMMISSION

Maryland Health Care Commission

Center for Health Information Technology
Rex W. Cowdry, M.D., Executive Director
David Sharp, Ph.D., Director

4160 Patterson Avenue, Baltimore, MD 21215
Tel: (410) 764-3460
Fax: (410) 358-1236
mhcc.maryland.gov

*MHCC is an independent, regulatory commission
administratively located within the
Maryland Department of Health and Mental Hygiene*