MARYLAND HEALTH CARE COMMISSION

Center for Health Information Technology

2007 Practitioner and Hospital EDI Review

The 2007 Practitioner and Hospital EDI Review provides an overview of electronic data interchange (EDI) in Maryland, examining the level of practitioner and hospital EDI in 2006 and identifying EDI trends since 2002. 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 and to process transactions in a manner which is fast and cost effective."[1] Pursuant to COMAR 10.25.09 *Requirements for Payers to Designate Electronic Heath Networks*, the Maryland Health Care Commission (MHCC or Commission) collects health care transaction data from government and private payers on an annual basis. These regulations also require payers to contract only with MHCC-certified electronic health networks (EHNs or networks), also known as claims clearinghouses.

The 2007 Practitioner and Hospital Review (Review) provides an overview of practitioner and hospital transaction data submitted to MHCC by 42 private payers, Medicare, Medicaid, and the seven Medicaid Managed Care Organizations (MCOs).[2] The Review also focuses on the six private payers – Aetna, CareFirst, Cigna, Kaiser, MAMSI, and United HealthCare[3] – that dominate the Maryland market and reported about 95% of the 2006 practitioner and hospital claims. As a result, their EDI activities have a large impact on EDI in Maryland. The remaining private payers are referred to as the "other private payers." Throughout this Review, EDI is described in terms of EDI share, which is a measure of the percent of claims received electronically. A listing of the 2007 EDI reporting payers can be found on the MHCC website at: mhcc.maryland.gov/edi/ediprogress/2007edireview_0108.pdf.

In 2006, private payer practitioner and hospital EDI increased about nine percentage points to roughly 74%. Government payers continued to report higher EDI than private payers, but their share grew at a slower rate, with Medicare increasing nearly two percentage points to 95%, and Medicaid increasing only about one percentage point to 91%. The Medicaid MCOs trailed all other payers, reporting an EDI share of about 61%, an increase of approximately six percentage points. Combined government and private payer EDI was approximately 81% in 2006.

The Administration Simplification provisions of the Health Insurance Portability and Accountability Act (HIPAA-AS) of 1996 included a section that defined standards for health care transactions, code sets, and identifiers in order to simplify and create standards for the transmission of electronic health care information between covered entities.[4] The transaction standards, which became effective in October 2003, defined data elements and formats for specific health care transactions, including 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]

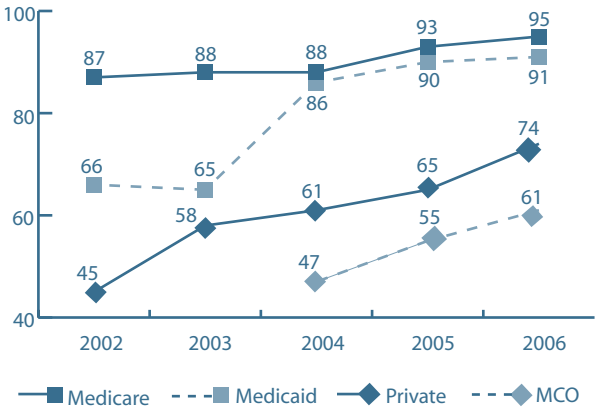
The last of the HIPAA-AS provisions, the National Provider Identifier (NPI), became effective in May 2007. The NPI is a standard identifier issued to providers by the Centers for Medicare and Medicaid Services (CMS), and must be used in standard electronic transactions. However, in April 2007 CMS implemented a contingency policy when it became apparent that many providers and payers would not be able to support the transition to NPI by the original May 23, 2007 deadline. The contingency policy will expire on May 23, 2008.

EDI is considered by many to be the foundation for health information exchange (HIE). HIE is defined as the mobilization of health care information electronically across organizations within a region or community,[6] and provides a mechanism to make health information more readily available and accessible to both providers and consumers. HIE is expected to change the way health care is provided by transforming the way in which information is obtained and used by consumers and providers. In 2004, a Presidential Executive Order established the Office of the National Coordinator for Health Information Technology under the United States Department of Health and Human Services to develop an infrastructure to support HIE.[7] There are currently many private, state, and federal initiatives underway to make HIE a reality.[8] EDI supports these efforts by providing a foundation for the exchange of clinical health information, using a common set of standards for the sharing and retrieval of electronic health information, and providing a framework upon which HIE can be implemented.

Government and Private Payer EDI Trends, 2002 - 2006

Government and private payer EDI grew steadily between 2002 and 2006. This time period reflects the change in EDI share before and after the implementation of HIPAA standard transactions in October 2003. It also illustrates some interesting differences in the growth of EDI by government payers compared to private payers. The change in practitioner and hospital EDI share from 2002 to 2006 for Medicare, Medicaid, the Medicaid MCOs, and private payers is illustrated below in Figure 1.[9]

Figure 1. Government and Private Payer Practitioner and Hospital EDI Share, 2002 – 2006



The EDI share for Medicare and Medicaid has consistently exceeded private payer EDI share. Medicare's EDI share remained the same between 2002 and 2004, but increased roughly five percentage points between 2004 and 2005. Medicaid's EDI share grew by nearly 21 percentage points between 2003 and 2004. Prior to 2004, however, Medicaid's electronic claims share was estimated by MHCC using data supplied by Medicaid; beginning in 2004, Medicaid was able to more accurately report EDI activity. By 2005, both Medicare and Medicaid EDI share changed minimally from the prior year, about two percentage points for Medicare, and one percentage point for Medicaid.

In the year following the implementation of the standard transactions, private payer EDI share grew modestly, increasing about three percentage points in 2004, and four percentage points in 2005. By 2006, however, private payer EDI share grew by about nine percentage points, rebounding from the slower rate experienced while transitioning to the standard transactions. This growth can be attributed to private payers directing their efforts to EDI expansion when they were able to address transaction implementation issues.

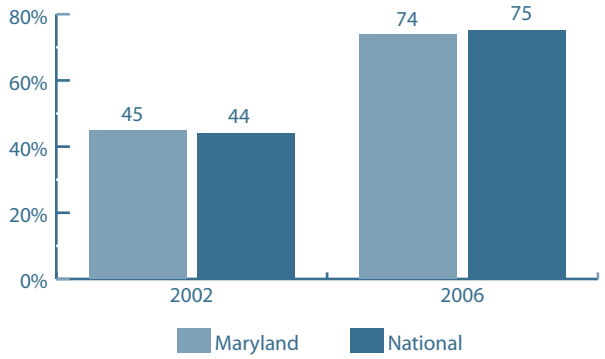
The MCOs reported the largest rate of growth in EDI, increasing nearly 14 percentage points since implementing the standard transactions. In 2006, MCO EDI share continued to trail private payer EDI share by roughly 13 percentage points, and Medicare and Medicaid EDI share by more than 30 percentage points.

The standard transactions were intended to standardize and promote EDI; but Medicare and Medicaid were able to derive benefit from the standard transactions more quickly than the private payers. Medicare's EDI share was also favorably impacted in part by the implementation of the Administrative Simplification Compliance Act (ASCA) in 2003, which prohibited payment for health care claims that were not sent electronically.[10] Many private payers have relied on assistance from EHNs to work with providers and billing system vendors to implement the standard transactions without disrupting the flow of electronic claims. EHNs have provided a valuable service to providers by converting non-standard transactions into standard transactions.

In an effort to recoup some of the costs associated with the standard transactions, many private payers initiated a variety of EDI strategies to increase provider electronic claim submission. These efforts included increasing the number of networks they use, partnering with networks to identify and convert paper billers to electronic claims, and expanding provider EDI outreach efforts. It is less expensive for the typical payer to process an electronic claim than a paper claim. Electronic claims cost about 85 cents to process, compared to roughly $1.58 for a paper claim.[11]

As expected, the growth of EDI in Maryland has been consistent with national trends. The Center for Policy and Research of America's Health Insurance Plans, a trade association of private insurers, conducted a survey in 2006, which replicated a similar one performed in 2002, of nearly 25 million claims processed by 26 health insurers throughout the country.[12] Figure 2 compares the private payer EDI share in Maryland and nationally in 2002 and 2006.

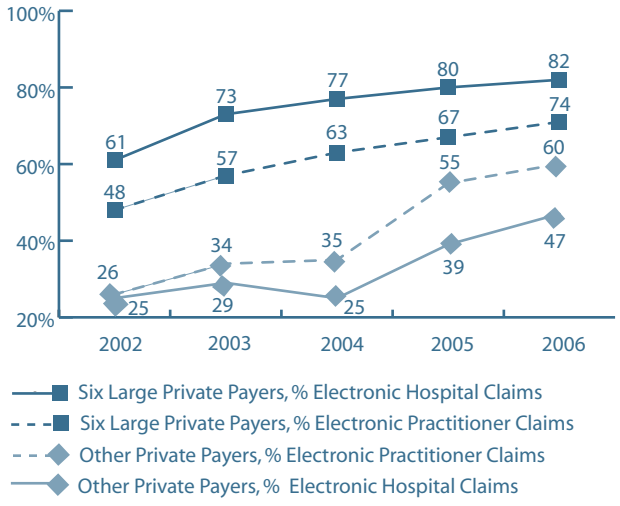
Figure 2. A Comparison of Maryland and National Private Payer EDI Share, 2002 and 2006



Private Payer Electronic Claim Trends

The six large private payers have consistently reported a greater share of electronic claims than the other private payers. Figure 3 compares the change in EDI share of the six large private payers versus the other private payers for both practitioner and hospital claims between 2002 and 2006. This time period reflects the change in EDI share before and after the implementation of the standard transactions, and illustrates the differences in the growth of EDI by large and small payers.

Figure 3. Private Payer Practitioner and Hospital Electronic Claim Trends, 2002 – 2006



The practitioner and hospital EDI share of the six large payers has consistently exceeded that of the other private payers, both before and after the implementation of the standard transactions. Between 2002 and 2006, practitioner EDI continued to experience a larger growth rate than hospital EDI. Payers have typically sought to automate practitioner claims in part because of the high volume of claims that practitioners generate. The impact of implementing the transaction standards slowed the EDI growth of the other private payers. Hospital EDI for the large payers exceeds the other private payers by about 35 percentage points.

Electronic claim submission requirements tend to be less onerous for large payers. In an effort to increase EDI share, the other private payers are beginning to utilize the same kinds of strategies to promote EDI as the six large payers use. Hospitals continue to express an interest in working with payers to increase EDI. They report only using paper bills when there are small volumes of claims for a payer, when their billing systems are not set up for electronic billing to certain payers, or when attachments are required for claims processing.

Six Large Private Payers

The six large private payers report variation in their EDI share. Table 1 presents the 2006 practitioner and hospital EDI share for each of the six large private payers, and reports the percent of EDI change since 2005.

Table 1. Six Large Private Payers - Percentage of Electronic Claims, 2006

Payer	Practitioner		Hospital	
	% EDI	% Change	% EDI	% Change
Aetna	64	2	70	2
CareFirst	81	8	86	- 0.6
Cigna	74	2	78	4
Kaiser	52	4	64	4
MAMSI	50	3	74	2
United Healthcare	79	11	87	11
Total	**74**	**7**	**82**	**2**

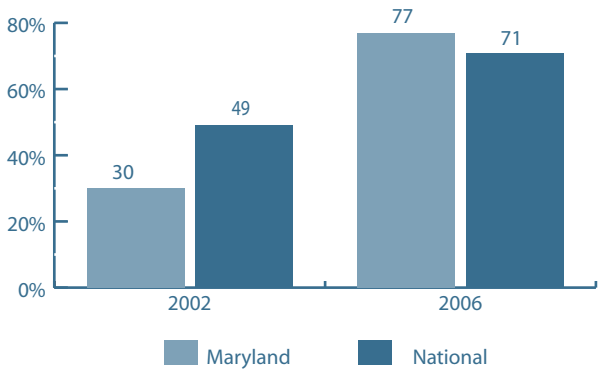
CareFirst and United Healthcare report the greatest share of practitioner and hospital EDI. CareFirst has increased their practitioner EDI promotion efforts over the last several years, identifying paper billers by specialty, practice size, and location, and then working with their EHNs to convert paper billers to EDI. CareFirst also offers free billing software to practitioners submitting less than 250 claims per month.[13] United Healthcare reported the greatest increase in EDI in 2006, almost 11 percentage points, for both hospital and practitioner claims. United Healthcare contracts with a large number of EHNs, which enables more providers to submit claims electronically. However, over the next several years, United Healthcare plans to accept transactions only through a single network interface.

Auto Adjudication of Claims

Auto adjudicated claims are claims that payers receive electronically and process without manual intervention. Payers strive to increase the number of auto adjudicated claims because it reduces the administrative cost of claims processing. Auto adjudicated claims can be processed more quickly and with fewer claims processors. Claims that are manually processed often generate more provider claim status calls, and consequently increase the number of customer service representatives needed to answer those calls. Payers cite the quick turnaround time of auto adjudicated claims to promote EDI.

America's Health Insurance Plans surveyed auto adjudication rates in 2002 and in 2006.[14] Figure 4 compares the level of auto adjudication in Maryland during those years with the national trends. In 2002, the rate of auto adjudication in Maryland trailed the national rate; by 2006, however, Maryland payers surpassed the national rate by about six percentage points.

Figure 4. A Comparison of Maryland & National Private Payer Auto Adjudication, 2002 and 2006



Maryland Medicaid MCOs

The EDI share of the Medicaid MCOs increased in 2006, but continued to trail Medicare, Medicaid, and the six large private payers.[15] Providers report frustration with the slow EDI growth of the MCOs. Table 2 shows the practitioner and hospital EDI share of each MCO, as well as the percent change in EDI share since 2005.

Table 2. 2006 Medicaid MCO EDI Share

Payer	Practitioner		Hospital	
	% EDI	% Change	% EDI	% Change
AmeriChoice	61	0	77	3
AMERIGROUP	69	2	86	14
Coventry Diamond Plan	40	7	43	4
Jai Medical Systems	0	0	6	6
Maryland Physicians Care	59	-1	90	10
MedStar Family Choice	37	2	0	0
Priority Partners	54	21	57	1
Total	**59**	**5**	**69**	**8**

AMERIGROUP had the highest practitioner and hospital EDI share, with hospital EDI share increasing 14 percentage points since 2005. Their EDI growth is a result of focused efforts on converting paper billers to electronic. AMERIGROUP's EDI promotion efforts include working with EHNs to match Tax IDs of paper billers to determine if providers are submitting claims electronically to other payers. Priority Partners experienced significant practitioner EDI growth over the last year. This increase is partially attributed to establishing connections with two additional EHNs. Maryland Physician's Care increased their hospital EDI share as a result of focused efforts on hospital EDI. Prior to 2006, Jai Medical Systems was not able to provide any electronic connectivity to providers. Over the last year, they began to accept some hospital claims electronically, and planned to accept electronic practitioner claims in 2007. MedStar Family Choice receives hospital claims only from MedStar hospitals. Due to challenges related to establishing connectivity between centralized billing operations for MedStar hospitals and MedStar Family Choice in prior years, electronic submission of hospital claims was not possible. However, in October 2007 MedStar Family Choice began receiving hospital claims electronically.

Other Administrative Electronic Health Care Transactions

The other, non-claim electronic administrative transactions have the potential to increase operating efficiencies for both payers and providers. These transactions include Health Care Claims, Health Plan Eligibility, Health Claim Status, Claim Payment and Remittance Advice, Referral Certification and Authorization, Enrollment/Disenrollment in a Health Plan, and Health Plan Premium.[16] Payers made a sizable gain in their ability to support non-claim transactions over the last year. With the exception of referrals and premium payments, payers supporting the other administrative transactions nearly doubled over the last year. Table 3 illustrates the percent of payers that accept the other administrative transactions.

Payers support these transactions in two ways: through electronic transmission of a batch file, whereby information for multiple patients are transmitted simultaneously in a single file, or via a payer website, which allows providers to enter patient information one at a time and receive information on a near real-time basis.[17] Most payers provide either batch or web-based transactions, or a combination of both, and may offer the batch mode for one transaction, while offering web-based access for another. Both batch and web-based transactions are helpful to providers depending on where patient care is delivered. For example, outpatient hospital service areas or physician offices benefit from a batch eligibility transaction because they can request eligibility information for multiple patients prior to the day of the appointment. Web-based transactions are desirable in hospital emergency rooms or urgent care centers where patient eligibility is confirmed at registration.

Table 4 shows which standard transactions are supported by the six large private payers, and also indicates whether batch or web-based transactions are available. MAMSI and United Healthcare are the only payers that accept both batch and web-based transactions. All payers report accepting some standard transactions in batch or via a website; however, none of the payers reported making all transactions available to providers electronically.

Table 3. Percent of Private Payers Supporting Other Administrative Transactions, 2003-2006

Payer	% of Payers Reporting			
	2003	2004	2005	2006
Health Plan Eligibility	28	32	46	76
Claim Payment & Remittance Advice	25	29	38	69
Health Claim Status	19	24	38	67
Enrollment/Disenrollment in a Health Plan	19	27	38	60
Referral Certification & Authorization	17	16	21	21
Health Plan Premium Payments	0	3	8	14

Table 4. Large Private Payers' Other Administrative Transactions

Payer	Other Administration Transaction											
	Health Claim Status		Health Plan Eligibility		Claim Payment & Remittance Advice		Referral Certification & Authorization		Enrollment/ Disenrollment in Health Plan		Health Plan Premium	
	W	B	W	B	W	B	W	B	W	B	W	B
Aetna	✓		✓		✓		✓					
CareFirst	✓		✓			✓	✓		✓			
Cigna	✓		✓			✓	✓			✓		✓
Kaiser			✓			✓				✓		✓
MAMSI	✓	✓	✓	✓		✓	✓		✓	✓		✓
United Healthcare	✓	✓	✓	✓		✓				✓		✓

KEY: W = Web-based B = Batch

The MHCC Certified EHN Program

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 (also known as 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; there are currently 32 MHCC-certified EHNs. The most current listing of certified networks, as well as those in candidacy status, can be found on the Commission website at: mhcc.maryland.gov/edi/ehn/index.aspx.

EDI in 2008

One of the primary challenges for sustained EDI growth in 2008 is effective industry-wide NPI implementation. The NPI replaces the multiple provider identifiers issued by payers and will be the only identifier permitted for use with electronic administrative transactions. The NPI is intended to eliminate provider identifiers unique to each payer. The transition to NPI is expected to initially have a negative impact on EDI as providers and payers resolve issues related to its implementation. Anticipating implementation challenges, CMS will not require an NPI on electronic transactions until May 23, 2008, as long as payers, providers and clearinghouses are working towards compliance.[18] Providers are likely to return to submitting paper claims if problems related to the implementation of the NPI are not resolved before the effective date.

The implementation of the transaction standards has had a positive effect on EDI, but has not produced the degree of benefit that was expected. "Successful deployment of HIPAA's EDI standards has relied heavily on coordination between critical trading partners – providers, vendors, clearinghouses, and health plans – coordination that has proven at times to be elusive."[19] Over the next year, payers plan to continue expanding their EDI services to ensure optimal adoption by providers. The Unsolicited Claim Status (also known as a 277U) is viewed by many payers as a way to encourage EDI. The

Unsolicited Claim Status is an electronic acknowledgement that a claim has been received by the payer. Payers expect the 277U to reduce the number of provider telephone inquiries. Providers view the 277U as a way to obtain more timely information about a claim, which can lead to improved claims inventory management and cash flow.

The technology to provide real-time claims adjudication (RTCA) has been available for several years, but ". . . until recently, there hasn't been any compelling reason for payers to invest in . . . [technology] when they could hold onto physicians' money instead. Now, however, the advent of health savings accounts and the growth of patient cost-sharing have prompted payers to take a second look at real-time claims adjudication. The idea is to tell patients what they owe at the point of care, so that their payments can be deducted automatically from their health savings accounts or flexible spending accounts."[20] Health Industry Insights conducted a survey in June 2007 that included 79 of the largest payers in business and technology innovation and investment, and reported that online and real-time claims adjudication and payment is a ". . . cornerstone of transparency initiatives."[21] Locally, CareFirst has offered this capability for several years. In April 2007, United Healthcare began offering real time claims nationally through its web portal.[22]

Over the next year, MHCC plans to build upon its existing EDI programs with payers and providers. As part of its EDI strategy, MHCC will target non-medical practitioners that have typically not participated in EDI. MHCC will also continue to focus on expanding the competitive landscape in Maryland by working to increase the number of networks certified by MHCC.

The Center for Health Information Technology

The Center for Health Information Technology (Center) is responsible for promoting health information technology. It is also responsible for MHCC's EDI programs and network certification activity. Each year the Center publishes information on the progress of payer and provider adoption of EDI. It uses this information to provide feedback to stakeholders in an effort to increase EDI activity in Maryland. The Center's initiatives broadly 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 networks.

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

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Endnotes

[1]45 CFR parts 160 and 162, August 17, 2000.
[2]Data received from payers is self-reported and is not audited by MHCC. The seven Medicaid MCOs include: AmeriChoice, AmeriGroup, Coventry Healthcare Diamond Plan, MedStar Family Choice (formerly Helix Family Choice), Jai Medical Systems, Maryland Physicians Care, and Priority Partners.
[3]The listing of the six large private payers includes affiliated companies. MAMSI was acquired by United Healthcare in 2004, but MAMSI products continue to be offered and supported on MAMSI platforms.
[4]HIPAA-AS covered entities are defined as health plans, health care providers, and health care clearinghouses, or EHNs.
[5]45 CFR parts 160 and 162, August 17, 2000.
[6]eHealth Inititiative, Connecting Communities Toolkit. Washington, D.C.
[7]The White House, Executive Order: Incentives for the Use of Health Information Technology and Establishing the Position of the National Health Information Technology Coordinator (Washington, D.C.: Office of the Press Secretary, April 27, 2004).
[8]MHCC's Center for Health Information Technology is involved in several HIE initiatives, which include the planning and implementation of a statewide HIE, assessing the privacy and security policies and business practices that impact HIE, and developing implementation plans to overcome those barriers, harmonizing policies of service area HIEs, staffing the Governor's Task Force to Study Electronic Health Records, and developing initiatives to promote the adoption of personal health records.
[9]The Medicaid MCOs were not required to submit EDI information to MHCC until 2004.
[10]42 CFR 424.32(d) (2). The regulation included provisions for exceptions in limited situations, which included small providers (those with fewer than 25 full-time equivalent employees), or claims from providers that submit an average of less than 10 claims per month.
[11]Center for Policy and Research, America's Health Insurance Plans, "An Updated Survey of Health Care Claims Receipt and Processing Times," May 2006, p. 5.
[12]Center for Policy and Research, America's Health Insurance Plans, "An Updated Survey of Health Care Claims Receipt and Processing Times," May 2006, p. 2.
[13]This is a CareFirst branded product supported by PayerPath, an MHCC-certified EHN.
[14]Center for Policy and Research, America's Health Insurance Plans, "An Updated Survey of Health Care Claims Receipt and Processing Times," May 2006, p. 4.
[15]These seven MCOs represent approximately 73% of the Medicaid-eligible population in 2006, but only about 37% of the total Medicaid claims volume.
[16]The Enrollment/Disenrollment in a Health Plan and Health Plan Premium standard transactions are conducted between payers and employers, which are not covered entities under HIPAA-AS. However, if an employer wishes to use either of those transactions, the payer needs to support it.
[17]Real-time can be defined as ". . . a system that responds to events within the same communication session as fast as possible. Typically, response times range from a few seconds to around thirty seconds and should not exceed one minute." Definition from the EHNAC website: http://www.ehnac.org/content/view/23/59/.
[18]NPI Tip Sheet, located on the CMS website at: http://www.cms.hhs.gov/NationalProvIdentStand/Downloads/ContingencyTipSheet.pdf.
[19]Statement of the Medical Group Management Association to the National Committee on Vital and Health Statistics, Subcommittee on Standards and Security, presented by Larrie Dawkins, July 31, 2007.
[20]Terry, Ken, Real time claims adjudication for real! , Medical Economics, Feb. 9, 2007, http://www.memag.com/memag/Medical+Practice+Management:+Billing%2FCollections/Real-time-claims-adjudication-for-real/ArticleStandard/Article/detail/402624.
[21]Merrill, Molly, U.S. healthcare payers to limit IT investments in 2008, HealthCare Finance News, November 16, 2007, http://www.healthcarefinancenews.com/story.cms?id=7294. Health Industry Insights provides health and life sciences industry executives, and the suppliers who serve them, with market research and advisory services.
[22]Wilbert, Lauren, United Health Offering Real-Time Claims Submission, Baltimore Business Journal, April 12, 2007, http://www.bizjournals.com/baltimore/stories/2007/04/09/daily31.html?b=1176091200%5E1446091.