Electronic Data Interchange

An Information Brief
November 2017

Background

The Maryland Health Care Commission (MHCC) annually assesses electronic data interchange (EDI) activity in the State and uses this information to advance EDI diffusion statewide. Electronic data interchange is the exchange of structured health care data between computer systems, governed by standards. In 1991, the U.S. Department of Health and Human Services explored opportunities to reduce health care costs by replacing paper transactions with standard electronic transactions. The passage of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) included Administrative Simplification provisions that required the establishment of national standards for electronic health care transactions. HIPAA requires that payors, providers, and health care clearinghouses use these standards. Use of standards can increase the portability and accessibility of health care information, increase efficiencies, reduce administrative costs, and facilitate anti-fraud measures.

2016 EDI Progress

Overview

Approximately 40 payors submitted an EDI progress report in 2016. The information presented in this brief highlights information on EDI activity in Maryland for government payors and the six largest private payors: Aetna, Inc. (Aetna), CareFirst BlueCross BlueShield (CareFirst), Cigna Healthcare Mid-Atlantic, Inc. (Cigna), Coventry Health Care of Delaware, Inc. (Coventry), Kaiser Permanente Insurance Company (Kaiser), and UnitedHealthcare of the Mid-Atlantic, Inc. (United).

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1 Code of Maryland Regulations 10.25.09, Requirements for Payers to Designate Electronic Health Networks, requires State-regulated payors with annual premiums of $1 million or more, as well as certain specialty payors, such as Medicare, Medicaid, and MCOs, to submit an EDI Progress Report to MHCC annually.

2 Standards specify how certain electronic transactions are transferred from one system to another. These also standardize the format of health care data and the content of the transaction.


5 Public Law 104-191.

6 Health care clearinghouses exchange electronic health care transactions between payors and providers; these are sometimes referred to as electronic health networks.


8 45 CFR Parts 160, 162, and 164.

9 Administrative transactions are identified by transaction codes and include: health plan eligibility (270/271), health claim status (276/277), referral certification and authorization (278), health plan premium payments (820), enrollment/disenrollment in a health plan (834), and claims payment and remittance advice (835).

10 Code of Maryland Regulations 10.25.09, Requirements for Payers to Designate Electronic Health Networks, requires State-regulated payors (payors) with annual premiums of $1 million or more, as well as certain specialty payors, such as Medicare, Medicaid, and Managed Care Organizations, (MCOs) to submit an EDI Progress Report to MHCC annually.
Electronic Claims

EDI activity continues to remain at nearly 100 percent for government payors (Figure 1). Medicare requires that providers, including practitioners, suppliers, and hospitals submit electronic claims unless they meet an exception criterion. Among private payors, EDI activity for hospitals and practitioners has increased by about one percent over the last year. Dental EDI has trailed medical; however, it has increased by 18 percent since 2014 among the top six private payors. Dental payors report implementing outreach and communication strategies aimed at encouraging EDI. Over the last three years, the top five private dental payors reported an increase of at least five percent (Figure 2). CareFirst reported an 11 percent decrease in EDI between 2015 and 2016, due to interruption of services with a clearinghouse partner that resulted in an increase in paper claims submissions. Slow EDI growth among dental practices can be attributed to a lack of knowledge regarding electronic claim submission requirements; sending paper claims when support documentation is required; and an unclear value proposition for EDI.

Figure 1. Percent EDI activity by Claim and Payor Type

![Bar chart showing EDI activity by claim and payor type for different years.]

Figure 2. Percent Dental EDI Activity Among Top Private Payors

![Bar chart showing dental EDI activity among top private payors for different years.]

11 The top six payors, including all claim types, are: Aetna, Inc. (Aetna), CareFirst BlueCross BlueShield (CareFirst), Cigna Healthcare Mid-Atlantic, Inc. (Cigna), Coventry Health Care of Delaware, Inc. (Coventry), Kaiser Permanente Insurance Company (Kaiser), and UnitedHealthcare of the Mid-Atlantic, Inc. (United).

12 A health care transaction may be exchanged with one or more clearinghouse before it reaches the payor.

13 It is estimated that between 2015 and 2016 this resulted in about 120,000 paper claims.

14 As of 2017, CareFirst has restored the service and is receiving electronic transmissions directly from the clearinghouse.
Other Administrative Transactions

HIPAA requires payors to accept EDI transactions electronically. Private payors support the requirements by accepting batch transactions from an electronic health network (EHN), or by using a web-based portal where providers enter transactions on an individual basis. Batch transactions are generated from a practice management system, which is used for scheduling and billing, making submissions more efficient and within the practice’s workflow. Web-based transactions typically require manual entry of information. United is the only private payor that supports batch for all transaction types. Batch transactions involving health plan eligibility (270/271) and claims status (276/277) are supported by Aetna, Kaiser, and United. All private payors support batch transactions involving an enrollment/disenrollment in a health plan (834); this transaction is used during the member enrollment process (Table 1).

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Aetna</th>
<th>CareFirst</th>
<th>Cigna</th>
<th>Coventry</th>
<th>Kaiser</th>
<th>United</th>
<th>Total</th>
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<tbody>
<tr>
<td>Health Plan Eligibility Inquiry (270)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Health Plan Eligibility Response (271)</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>5</td>
</tr>
<tr>
<td>Health Claim Status Inquiry (276)</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>5</td>
</tr>
<tr>
<td>Health Claim Status Response (277)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>5</td>
</tr>
<tr>
<td>Referral Certification and Authorization (278)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>4</td>
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<tr>
<td>Enrollment/Disenrollment in a Health Plan (834)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>1</td>
</tr>
<tr>
<td>Total (#)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>
Electronic Health Networks

EHNs provide a range of services to providers and payors. Most notably, they function as an intermediary between providers and payors for purposes of validating transactions and forwarding them to payors.\(^{15}\) Approximately 40 EHNs operate in the State. EHNs are required to obtain national accreditation and MHCC certification to accept transactions originating in Maryland. National accreditation and MHCC certification must be renewed every other year. The majority of private payor electronic transactions are routed through Change Healthcare, OptumInsight, and RealMed at 57 percent (about 22M out of roughly 38.9M transactions). Change Healthcare is considered to be the largest EHN nationally. OptumInsight is owned by United. RealMed, an Availity company and a national organization, has established agreements with a number of large providers in Maryland. About 37 EHNs provide EDI services for the remaining 42 percent of electronic transactions (Figure 3).

Remarks

It is not too difficult to imagine where the health care system would be today absent EDI. The use of technology to support the administrative aspects of health care has generated numerous efficiencies that include cost-savings, improved productivity, and faster processing.\(^{16,17}\) In general, medical providers and payors have performed laudably in optimizing EDI. On the other hand, dental EDI lags well behind the medical community locally and nationally, which is at 74 percent.\(^{18}\) Dental EDI is not likely to increase unless payors’ business rules around required documentation are addressed and payors do more to educate dental providers on the benefits of EDI. Over the next year, MHCC intends to work with dental payors to explore opportunities for expanding EDI.

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\(^{15}\) For example, EHNs will validate that the claim is complete and all required fields are completed.

\(^{16}\) According to the America’s Health Insurance Plans, in 2011, the average cost of processing a paper claim was about $1.36 as compared to roughly $0.99 for an electronic claim. Available at: [http://www.ihqre.org/tag/claims-cost/](http://www.ihqre.org/tag/claims-cost/).

\(^{17}\) Most payors process paper claims in about 30 days while electronic claims can often be processed in real-time.