Health Care Transactions Used in Dentistry

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The development and adoption of data exchange standards for health care transactions is a crucial step towards Administrative Simplification. Administrative Simplification is intended to streamline the business of health care by setting standards and rules that can be incorporated nationwide by payors and providers. Administrative Simplification aims to bring to health care the efficiencies that the financial and retail sectors have realized with electronic transactions. The success of health information technology (IT) depends on the ease and efficiency of the electronic exchange of both clinical and administrative data. The structured data requirements under Administrative Simplification allow for the exchange of health care data with increased ease and efficiency between multiple payers and providers.

WHAT ARE DATA EXCHANGE STANDARDS/EDI?

When you move data from one application to another, the way the data is structured may not be compatible between the two systems. Data exchange is the transformation or restructuring of the data to suit the new system. The aim of this data exchange is not to lose or change the meaning of the information in the transfer.

Data exchange standards are formal rules for the structure of data elements and standardization of the format in which data will be shared. Electronic Data Interchange (EDI) offers a proven and secure way to improve a dental practice's bottom line by reducing the need for dentists to deal with each dental benefit plans' unique means of conducting business.

In the vast landscape of health care EDI there are several transaction types that are used most frequently in the dental industry. Below we explore these different health care transactions, the shorthand descriptor used to reference each, and how the adoption of electronic processes can help dental practices in their day-to-day operations.

WHAT IS A HEALTH CARE TRANSACTION?

A transaction is an electronic exchange of information between two parties to carry out financial or administrative activities related to health care.

When electronic health care transactions are used effectively, they:

- Increase operational efficiency through automation;
- Improve the quality and accuracy of information; and
- Reduce overall operating costs for providers and payers.

As required under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Department of Health and Human Services (HHS) adopted certain transactions for the electronic exchange of health care data. HIPAA covered entities (health plans, clearinghouses and providers who conduct transactions electronically) must use the adopted standards when conducting electronic transactions.

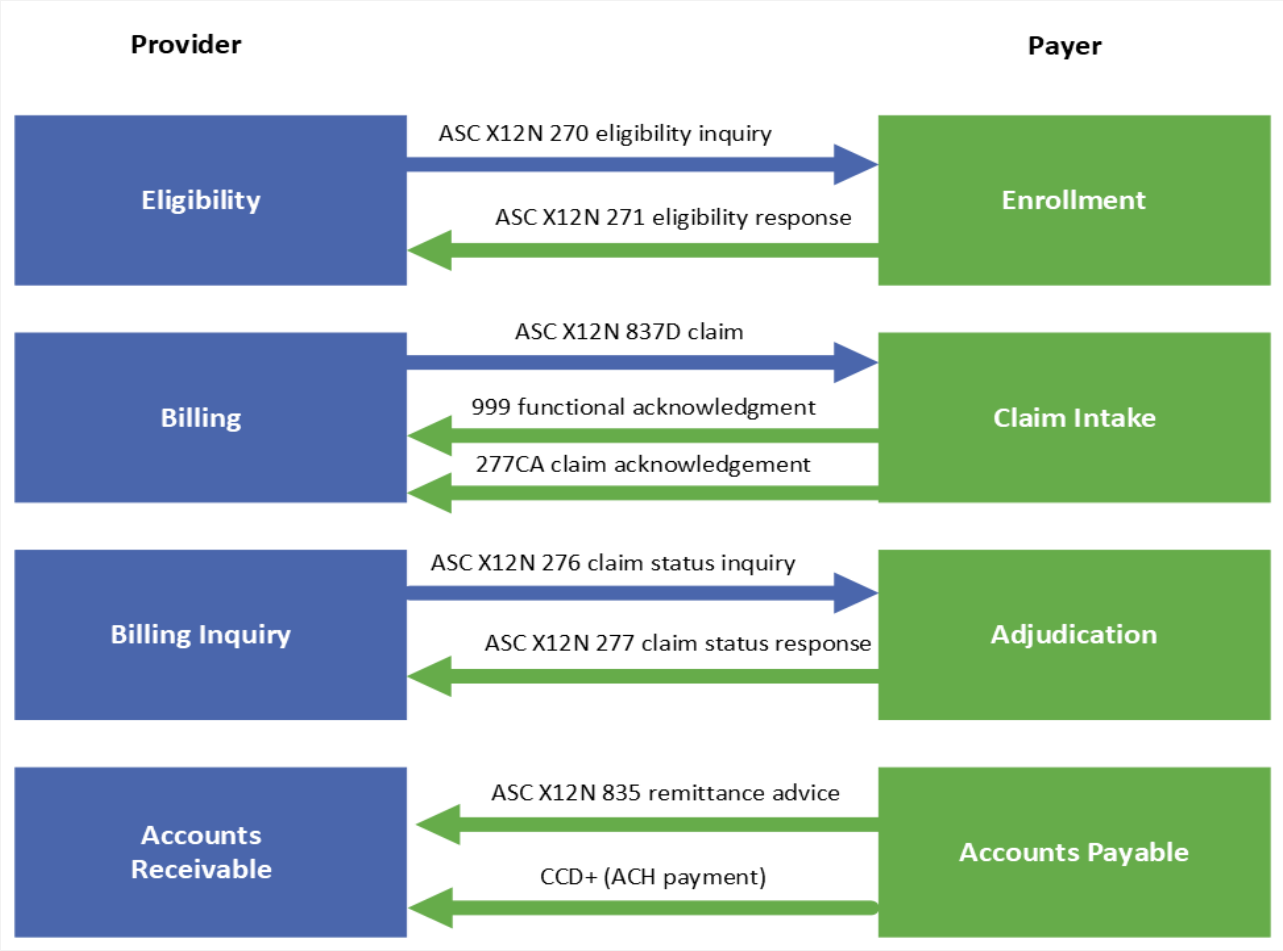
Currently, the dental industry uses electronic transactions primarily for administrative data exchange for claims processing and other areas of revenue cycle management.

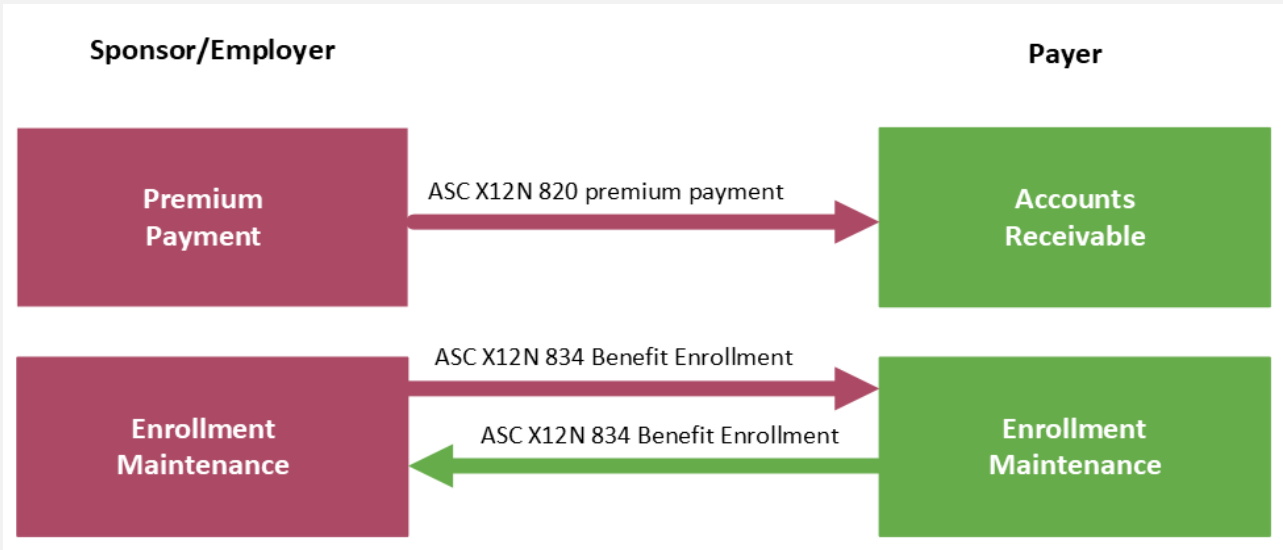
These transactions include:

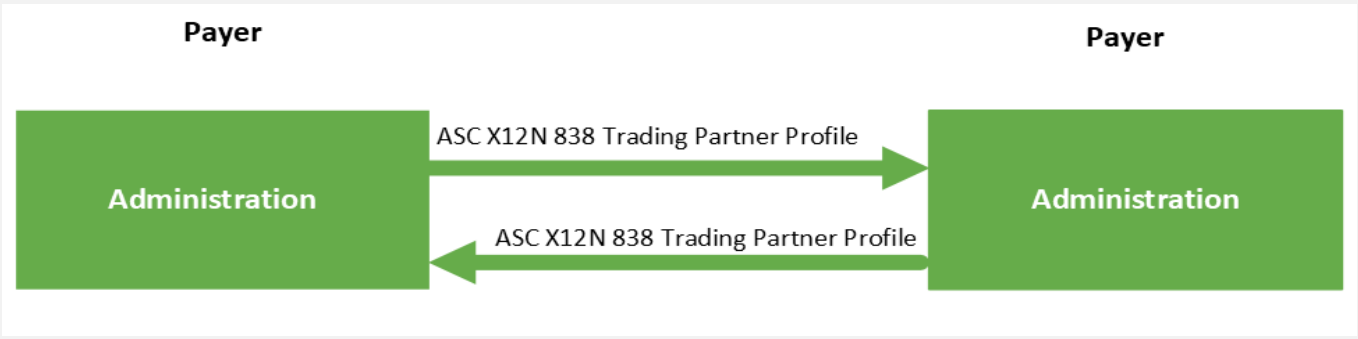
Transaction	Transaction Standard	Definition	Currently Federally Mandated
Eligibility and Benefit Verification Request and Response	ASC X12N 270/271	An inquiry from a provider to a payer, or from one payer to another payer to obtain eligibility, coverage or benefits associated with the plan	Yes
Prior Authorization	ASC X12N 278RP/278RQ	A request from a provider to a health plan to obtain authorization for healthcare services	Yes
Claim Submission	ASC X12N 837D	A request to obtain payment or transmission of encounter information for the purpose of reporting delivery of health care services.	Yes
Attachments	ASC X12N 275, HL7 CDA*	Additional information submitted with claims for payment, claim appeals or prior authorization, such as medical records to support a claim or to explain the need for a procedure or service.	No
Acknowledgements	ASC X12N 277CA/999	A health plan's response to a provider or provider's clearinghouse that they received information from the provider or clearinghouse, or confirmation received by a provider that the information shared with a health plan has been rejected or accepted.	No
Claim Status Inquiry	ASC X12N 276/277	An inquiry from a provider to a health plan to determine the status of a health care claim or a response from the health plan.	Yes
Claim Payment	NACHA Corporate Credit or Deposit Entry with Addenda Record (CCD+)	An electronic funds transfer (EFT) from a health plan's bank to a provider's bank; including payment and data specific to the payment.	Yes, must include the Trace Reassociation Number (TRN)
Health Care Payment & Remittance Advice	ASC X12N 835	The transmission of explanation of benefits or remittance advice from a health plan to a provider explaining a payment.	Yes
Premium Payment/Explanation *(employer)	ASC X12N 820	This transaction occurs between payers and employers	Yes
Enrollment/Disenrollment in a health plan	ASC X12N 834	This transaction occurs between payers, TPAs and employers	Yes
Trading Partner Profile	ASC X12N 838	Used to report changes in the EDI environment information, tax information, entity relationships, and general business profile information to update automated information data bases between trading partners.	No

- Both HIPAA standards and CAQH CORE Operating Rules are federally mandated for Eligibility and Benefit Verifications, Claim Status Inquiry, Claim Payment, and Remittance Advice.
- ASC X12N 275 and HL7 CDA are both industry recognized standards for electronic attachments
- TRN is required by law by CAQH operating rules in CCD+
  TRN stands for Reassociation Trace Number, which is a unique identification number used in Electronic Remittance Advice (ERA) transactions. The TRN is used to match an ERA with the related Electronic Funds Transfer (EFT).

The most commonly used EDI transactions between health plans and providers are outlined below.







UNDERSTANDING THE SAVINGS POTENTIAL OF ADOPTING EDI TRANSACTIONS

According to the 2023 CAQH Index Report, full adoption of electronic transactions could save the dental industry approximately $1.9 billion a year in direct costs; $364 million in estimated cost savings opportunities for payers and $1.5 billion in estimated cost savings for providers. The largest opportunities for administrative cost savings are:

- **Reduced Paper Usage**: EDI eliminates the need for paper-based transactions such as claims, EOBs and payments. This reduces costs associated with paper, printing, and mailing.
- **Faster Transaction Processing**: EDI allows for faster processing of transactions compared to manual methods. This reduces the time and labor costs involved in handling paperwork and administrative tasks.
- **Fewer Errors and Rejections**: EDI systems often have built-in validation checks that reduce errors in claims submissions and other transactions. Fewer errors mean fewer resources spent on correcting mistakes and resubmitting claims.
- **Streamlined Workflow**: Automating transactions through EDI streamlines the workflow within the practice. This frees up administrative staff to focus on higher-value tasks rather than repetitive data entry and paperwork.
- **Improved Cash Flow**: Faster processing and reduced errors mean that payments can be received more quickly. This improves cash flow and reduces the need for follow-up on outstanding payments.
- **Integration with Practice Management Systems**: EDI systems can integrate directly with practice management software, reducing the need for manual data entry and ensuring data consistency across systems.
    - Note that there is still a need for manual processing of some transactions via the use of claim forms, portal submissions of claims and processing of Explanation of Benefits (EOBs) and paper checks.
- **Compliance and Reporting**: EDI systems often include features for regulatory compliance and reporting. This can reduce costs associated with audits and ensure that the practice meets regulatory requirements efficiently.
- **Enhanced Partner Relationships**: EDI facilitates seamless communication with insurance companies, vendors, and other partners. This can lead to better relationships and potentially better terms or discounts, further reducing costs.

Practice Management Systems

Dental practice management systems are the window into EDI transactions for most dentists. The systems offered by the various practice management system vendors active in the dental industry are designed to provide integrated patient scheduling, patient records and charting, correct claims formatting and submission, efficient electronic claim filing, reconciliation of account receivables with electronic payments, eligibility and benefit checking, and other functions.

To make it easier to manage your claims processing expenses, most practice management systems typically bundle clearinghouse transaction fees with their software fees. Clearinghouses are intermediaries between dental offices and dental benefit plans. Clearinghouses accept electronic transactions and establish links with all dental benefit plans so that practices are not burdened with managing individual connections with every dental benefit plan they work with.

Because every practice management system communicates with one or more clearinghouses, practice staff can discuss clearinghouse issues with the representative of their practice management system. Or they can reach out directly to clearinghouses to review which electronic transactions can interact with their system and take advantage of Administrative Simplification opportunities. For those practices that do not have a practice management system, this is a good time to consider some of the many and varied options available to dentists and their practices.

How are standards developed?

Designated Standards Maintenance Organizations (DSMOs) Standards Development Organizations (SDOs) play a crucial role in creating and maintaining standards across various industries, including health care. Volunteer members of SDOs form work groups or committees composed of subject matter experts, technical representatives, industry professionals, and other relevant stakeholders. These groups are tasked with developing and revising standards. Once standards are developed and implemented, SDOs must maintain and update versions to fix issues based on implementation experience to add new capabilities based on user needs. End user feedback is crucial to improve and advance these standards.

DSMOs are entities recognized by HHS under HIPAA to develop, coordinate and revise technical standards for transactions and code sets adopted under the law. These standards are essential for ensuring the electronic exchange of health care information among covered entities.

The following table outlines the some of the informatics Standards used in dentistry and the DSMO responsible for them:

DSMO, SDO, DSS or Other Organization	Function	Standards
ADA DeCC – Dental Content Committee of the American Dental Association	The DeCC is a named Designated Standards Maintenance Organization under HIPAA. This ADA committee initiates and reviews content change requests affecting any HIPAA administrative simplification standard electronic transaction on behalf of the dental sector.	ADA Claim Form
ADA		Code on Dental Procedures and Nomenclature (CDT Code) Systematized Nomenclature of Dentistry (SNODENT) ANSI/ADA Standards Program: Content Standards for Dentistry

American Medical Association		Current Procedural Terminology (CPT)
Accredited Standards Committee (ASC)	ASC X12 develops and maintains standards for electronic data interchange relating to business transactions. ASC X12N, the Insurance Subcommittee of ASC X12, develops and maintains standards for health care administrative transactions. ASC X12 is a named Designated Standards Maintenance Organization under HIPAA.	ASC X12 270: Eligibility, Coverage or Benefit Inquiry. ASC X12 271: Eligibility, Coverage or Benefit Information ASC X12 275: Additional Information to Support a Health Care Claim Services ASC X12 276 ASC X12 277 ASC X12 277CA ASC X12 277U ASC X12 277RFI ASC X12 837 ASC X12 834 ASC X12 835 ASC X12 997 ASC X12 999
DirectTrust	DirectTrust Standards (developed by the DirectTrust Standards division of DirectTrust) are designed to serve the public interest by facilitating interoperability, interchangeability of encrypted health information to known trusted recipients.	The Direct Standard HISP Accreditation
HL7 – Health Level Seven	HL7 develops and maintains standards primarily for the exchange, integration, sharing and retrieval of health information to support the clinical practice and management of health services, including standards for structured attachments. HL7 is a named Designated Standards Maintenance Organization under HIPAA.	FHIR® HL7 FHIR® Implementation Guide: Dental Data Exchange HL7 CDA® R2 Implementation Guide: Dental Data Exchange CARIN Blue Button: EOB for Dental; Gravity Project; DaVinci Project
MITA – Medical Imaging & Technology Alliance	MITA, through its parent organization, NEMA, is an ANSI-accredited standards developer. NEMA's first X-ray standard was published in 1926, meaning that it has been developing medical imaging standards for more than 90 years.	DICOM
NCPDP – National Council for Prescription Drug Programs	NCPDP maintains EDI standards for the retail pharmacy industry. NCPDP is a named Designated Standards Maintenance Organization under HIPAA.	
NUBC – National Uniform Billing Committee	NUBC maintains content for institutional electronic and paper claims. It is chaired by the American Hospital Association (AHA). NUBC is a named Designated Standards Maintenance Organization under HIPAA.	CMS 1450 Claim Form
NUCC – National Uniform Claim Committee	NUCC maintains content for professional electronic and paper claims. It is chaired by the American Medical Association (AMA). NUCC is a named Designated Standards Maintenance	CMS 1500 Claim Form

	Organization under HIPAA.	
SNOMED-CT - Systematized Medical Nomenclature for Medicine–Clinical Terminology		SNOMED

Who must use HIPAA mandated standards?

Entities that must comply with the use of HIPAA-mandated standards include both covered entities and business associates of covered entities.

Covered Entities-

- Health Care Providers: This category includes dentists, doctors, Federally Qualified Health Centers, hospitals, nursing homes, pharmacies, and other health care providers who transmit any health information in using any of the HIPAA-adopted electronic transactions.
- Health Plans: Health plans include health insurance companies, HMOs (Health Maintenance Organizations), company health plans, and government programs that pay for health care, such as Medicare, Medicaid, and military/veterans' health programs.
- Health Care Clearinghouses: These are entities that process nonstandard health information they receive from another entity into a standard (i.e., standard electronic format or data content), or vice versa.

Business Associates-

A business associate is a person or entity contracted by a covered entity to perform certain functions or services that involve the use or disclosure of Protected Health Information (PHI). Any business associate of a covered entity that handles PHI must also comply with HIPAA standards. Examples of business associates include:

- Third-party administrator that assists a health plan with claims processing.
- Billing companies.
- Products and services that process eligibility checks for dental patients.
- Business Intelligence tools and providers.
- IT support providers.
- Consultants.
- Legal firms.

Opportunities for the Dental Industry

Participation in SDOs is crucial to ensure that the unique needs and interests of the dental industry are recognized and addressed. Providers, Practice Management Software vendors, Clearinghouses, Payers, and Associations representing these groups have an important perspective that will help shape the future of standards used in health care. In addition to joining SDO work groups to provide feedback and assist in the development of standards, dental offices can:

1. Take advantage of education tailored towards the dental industry regarding the impact of federal regulations;
2. Adopt technologies designed to support the HIPAA administrative standards;
3. Participate in CAQH Index Reports; and
4. Join WEDI and participate in applicable workgroups.

Resources

The following is a list of advisory groups and SDOs, as well as non-SDO standard-setting organizations, and other related organizations that help HHS to develop Administrative Simplification standards.

Advisory Groups

- NCVHS – National Committee on Vital and Health Statistics
- WEDI – Workgroup for Electronic Data Interchange

Designated Authoring Entity for Operating Rules

- CAQH CORE – Committee on Operating Rules for Information Exchange

Designated Standard Maintenance Organizations

- ADA DeCC – Dental Content Committee of the American Dental Association
- ASC X12 – Accredited Standards Committee
- HL7 – Health Level Seven
- NCPDP – National Council for Prescription Drug Programs
- NUBC – National Uniform Billing Committee
- NUCC – National Uniform Claim Committee

Non-DSMO Standard-Setting Organizations

- ANSI – American National Standards Institute
- EHNAC – Electronic Health care Network Accreditation Commission
- HIBCC – Health Industry Business Communications Council
- NACHA – The Electronic Payments Association
- NAIC – National Association of Insurance Commissioners
- NISO – National Information Standards Organization

Accreditations

- DirectTrust
- Heath Information Service Providers - HISP

Further Resources

- ONC- Health IT: What are health IT Standards?
- Centers for Medicare & Medicaid Services: Adopted Standards and Operating Rules
- CAQH 2023 Index Report