Data Mapping for HIPAA Transactions (HIPAA on the Job)

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If you have been focusing primarily on HIPAA's privacy and security regulations, not transactions requirements, this "HIPAA on the Job" is a must-read. Ensuring that you have all the required data content in your electronic systems is key to your organization's compliance with the transactions regulations. Perhaps even more important, however, is ensuring that claims are paid on time and other financial benefits are achieved from use of the transactions.

The standards become effective October 16, 2002, just a little more than year from now.

What Are My Options?

HIPAA calls for adoption of the American National Standards Institute (ANSI) Accredited Standards Committee standards for electronic transactions, formally known as ASC X12N. The name of each standard transaction is a number. See "Required X12N Standard Transactions," for the required transactions and their names. "Transactions Flows," describes how these transactions are used in actual practice.

Each standard has a prescribed format and content. The format is used for electronic transmission. The content includes required data elements and situational data elements.

For any given transaction, certain data elements are always required. Depending on the data supplied, additional data elements may be required. These are called situational because they depend on the situation created by the required data elements. For example, if a claim is for a delivery service to report a newborn's birth weight, weight in grams is a situational data element. Situational data elements are not optional-they are required under the situation specified. In fact, there are no optional fields, and health plans may not require providers to supply any alternative or additional data beyond what the standard requires. A separate standard for claims attachments for when additional information is required is being developed. This standard will also require a specified set of minimum necessary data. A notice of proposed rulemaking has not yet been published.

While all health plans and healthcare clearinghouses must be able to accept the ASC X12N standards format and content by the effective date, providers have options. They may continue business as usual, relying on a clearinghouse not only to convert claims to standard format, but to derive any of the additional required data content. Providers may also choose to supply standard content in nonstandard format to a clearinghouse, which would reformat it for sending to health plans. Providers may choose to send standard content to health plans through the Internet. This is called direct data entry. Finally, providers may adopt the standard format themselves and submit the standard content in standard format either to a clearinghouse or to health plans directly.

Providers may also choose to "mix and match"-sending some transactions one way and others another way. For example, some may choose to use direct data entry for eligibility benefit inquiry and send standard content for a claim to a clearinghouse. Some providers may choose to send standard format and content directly to government payers and use a clearinghouse for commercial payers. There are many options. (See "Provider Options for HIPAA Transactions.")

Standard Content Is Key

Obviously, pros and cons are associated with each of the options. Providers should conduct a thorough investigation of the costs and benefits of each option. For example, if you convert to the standard format, there will be no need for a clearinghouse to reformat claims for every different health plan. However, clearinghouses currently perform other functions, such as state data reporting, which may be desirable to retain.

Whatever option is chosen, however, providers should at least generate the standard content themselves. It has been found that as many as 50 percent of the data elements required by the 837 claim are not included in the "standard" UB-92 claim form. These data may or may not be routinely captured electronically in your organization, and some are captured only in clinical systems that do not interface with the patient accounting system.

In the delivery service claim example cited above, birth weight may be captured in a clinical information system but not currently transmitted to patient accounts. While clearinghouses can derive some data (such as age from birth date or converting pounds into grams), providers put themselves at great risk if they rely on a clearinghouse to attempt to derive all data for them. Make sure that systems have the ability to generate all required data.

What Role Does the Vendor Play?

Comparing the data elements required in the transactions to the data electronically available and interfaced with the patient accounting system is the first step to determining the impact of the transactions on your organization.

To make this comparison, you may want to perform an in-house review and then contact your vendor to determine how they will address the additional data requirements. Because time is running short, however, you may find it more expeditious to contact the vendor at the same time as your own in-house review.

Ask the vendor for the list of all required data elements, their map of the data elements currently existing in their patient accounting system product, and their plan for acquiring the remaining data elements. Also, ask for information on the vendor's timeline for making the modifications, what cost, if any, they will charge for the modification, and what process they will follow to update your systems and assist you in performing tests of transmitting the transactions.

Be prepared to be aggressive to achieve the desired results. Most system maintenance contracts include clauses wherein the vendor will supply changes based on new federal regulations. Because HIPAA provides options for providers, however, some vendors may not consider this clause to apply to the data elements for HIPAA transactions.

If your vendor's response is not satisfactory, it may be necessary to extend the data mapping to evaluate your clearinghouse capability. If the clearinghouse cannot derive the required data elements, your case that the data element change is required by federal regulation is strengthened.

Finally, it's risky to rely solely on the vendor to determine your data needs. Most major vendors are addressing HIPAA requirements today and if you follow a "best of fit" vendor strategy and have comprehensive interfaces, you may be in reasonably good shape with a map supplied by your vendor.

But if you use multiple niche systems as sources for some data, your vendor may not be in the best position to determine your data needs or what interfaces may be required. If your system is old, supplied by a small vendor, or you experienced Y2K-related difficulties, you will want to begin your data mapping early enough to either negotiate with your existing vendors or seek new ones.

Understanding Data Mapping

To either add to a supplied data map or conduct your own data mapping, first generate a list of all the required data elements for the transactions you will be conducting.

For this, you will need to obtain the ASC X12N implementation guides for each of these transactions standards. The guides may be purchased on CD-ROM or downloaded free of charge in PDF format from the Washington Publishing Company at www.wpc-edi.com/HIPAA_40.asp. If you choose to download them, you will need to register and wait a few days for confirmation of your registration. Registration does not require payment. The files are large, so use a high-speed Internet connection.

Once you have the implementation guides, create a table or spreadsheet identifying the source(s) and characteristics of the data elements. This listing may be as simple or complex as needed to conduct the task. If you plan to adopt standard formats for real-time transmission to a health plan, you may wish to track all of the information in the sample data map. At minimum, track those marked with an asterisk in the "Sample Data Map."

When you have identified all the data elements, their sources, and their characteristics, you will be able to identify the gaps. Flag each required data element that will need to be added or modified or will require an interface from another system. Where the data element does not currently exist in any electronic system, evaluate the flow of operations to determine how it can best be captured.

Who Should Participate?

Data mapping is a team effort for your organization. Understanding the data elements and ensuring that a given physical field is the same as a data element in the ASC X12N standard requires the judgement of an HIM professional. Some of the sources of data may not be immediately apparent, especially if they are in a clinical system or the data are not in electronic form at all. HIM professionals know the source of data elements and can cite where and when such a data element is captured in either electronic or paper form.

Also, involve representatives from admissions and registration areas. Many of the processes to verify eligibility and initiate a claim will draw from data collected upon admissions or registration. These representatives can identify whether a data element is collected on admissions/registration and its completeness and accuracy. As part of the data mapping process, they can begin to anticipate changes in their work flow that will be necessitated by adoption of the new transactions standards.

Certainly real-time eligibility verification will be moved from the "back office" to the admissions or registration area to benefit by knowing of and being able to collect co-pays up front or the need for making financial arrangements. Many organizations have already started this process, but it will be intensified with new transactions.

Obviously, business office representatives must be involved to determine which transactions will be used and what data their existing patient accounting systems collect.

Information systems representatives will contribute information concerning existing interfaces and how well other systems may be able to interface where necessary. Today, some admissions/registration systems do not fully interface with patient accounting systems. Many patient accounting systems are not capable of both inbound and outbound feeds.

These technical issues must be resolved prior to adoption of the standards. The information systems area will also likely be responsible for conducting the final tests of transmitting the transactions or verifying certification of their interoperability from an organization such as the Electronic Healthcare Network Accreditation Commission (EHNAC) (www.ehnac.org).

The Time Is Now

However you structure your transactions preparedness, data mapping will be critical to ensuring that all transactions contain the required data. The purpose of HIPAA administrative simplification is to promote the use of information systems and to streamline financial and administrative processing. As an industry, we have lived for too long with multiple formats and requirements options of the many different health plans. As we fully adopt HIPAA's transactions standards, there is a real opportunity to achieve cost savings and cash flow improvements.

Required X12N Standard Transactions

Standard	Title	Comment
837	Claim and coordination of benefits for professionals, institutions, and dentists	Replaces UB92 and HCFA 1500
835	Payment and remittance advice	
276/277	Claim status request and response	

834	Benefit enrollment and maintenance	Used by employers to enroll members in health plans (if contractually required)
270/271	Eligibility benefit inquiry and response	
820	Payment order and remittance advice	Used by employers to pay premiums (if contractually required)
278	Request for services review and response	Used for referral authorizations

Provider Options for HIPAA Transactions

Provider	Clearinghouse	Health Plan
Non-standard format and content to clearinghouse	Converts to standard format and derives data for content. Performs other functions	Receives standard format and content from clearinghouse
Standard content in non-standard format to clearinghouse	Converts to standard format. Performs other functions	Receives standard format and content from clearinghouse
Standard content in non-standard format through Internet		Receives standard content from provider
Standard content in standard format to clearinghouse	Performs other functions	Receives standard format and content from clearinghouse
Standard content in standard format to health plan		Receives standard format and content from health plan

Sample Data Map for Source of HIPAA Ttransactions Data Elements

Minimum	Information	Source(s)
*	Standard data element name	Implementation guides from WPC
	Data element definition/description	Implementation guides from WPC
*	Data type (see implementation guide for standard types; e.g., Nn = Numeric)	Implementation guides from WPC
*	Min/Max length of field (e.g., 2/20 is minimum of two characters and maximum of 20	Implementation guides from WPC

	characters)	
*	External code source (e.g., AD = American Dental Association Codes)	Implementation guides from WPC
	ASC X12N standard(s) applicable (e.g., 837, 834)	Implementation guides from WPC
	Required/Situational	Implementation guides from WPC
*	Primary institutional source	System data dictionary Paper-based form
*	Field reference name (physical name) if different from standard data element name	System data dictionary Paper-based form
	Screen display name (logical name) if different from standard data element name or field reference name	System data dictionary Paper-based form
	Additional institutional sources and their physical and logical naming conventions	System data dictionary Paper-based form
*	System interfaces (supply names of systems with which source system interfaces)	Interface table
	Responsible department (e.g., HIM)	
	Support (e.g., IS, vendor)	System owner
	Batch/Real time	System owner
	HL7 compliant	System owner
*	Inbound/Outbound feed(s) capability	System owner
	Medium (e.g., tape, disk, paper)	System owner
	Transmission (e.g., file transfer, shipped)	System owner
	Frequency of transmission (e.g., daily, monthly, quarterly)	System owner
*	Flag indicating required vendor addition/change/ interface	
	Date vendor contacted	
	Vendor response	

	Vendor supplied solution	

Transaction Flows

Download the PDF File by Clicking Here

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