

X12 UPDATE

October 21, 2020



DISCLAIMER

- This presentation is for informational purposes only
- The content is point-in-time information, subject to revision



STRONG & PROGRESSING

- X12 standards are the workhorse for business to business exchanges
- Billions of transactions based on X12 standards are utilized daily across various industries including finance, government, health care, insurance, supply chain, transportation, and others
- Millions of entities around the world have an established infrastructure that supports X12 transactions, representing a significant investment in a stable and effective infrastructure

X12



STRONG & PROGRESSING

- X12's product library is constantly evolving, available in various mediums, and includes:
- *The EDI Standard, comprised of hundreds of transactions and internal code lists*
 - *Technical reports, including implementation guides, describing various uses of the EDI Standard*
 - *External code lists (terminology or vocabulary resources)*
 - *Schema based on the EDI Standard and implementation guides*
 - *Best Practice Guidelines*

X12



MINDSET

- Open-minded, with vision and insight related to both current and developing technologies
- Responsive to business requirements from members and other organizations
- Respectful of varying viewpoints and diverse perspectives
- Collaborative with other SDOs, industry groups, government, and business-focused entities
- Led by a strong group of enablers and facilitators

WEBSITE REDESIGN

- X12 recently redesigned its website and the new look and feel is a hit!
- The site's new infrastructure is secure, built for fast access, and ensures there are no barriers related to physical disabilities
- The new design offers a clean, refined style that improves readability and functionality on desktops, tablets, and mobile devices
- The website features simplified navigation, richer content, and a more evolved site structure

X12



X12 STANDARDS

THE ISX SEGMENT

Continuing into the 21st
Century



CHALLENGES FOR X12 TO SUPPORT

1. Avoid processing issues when the use of a known character is also an EDI delimiter
2. Supporting languages other than English
3. Use of new code list versions with older versions of a transaction set and vice-versa

X12



INTRODUCING THE ISX SEGMENT

- A new optional segment – *the Interchange Syntax Extension (ISX)* – has been added to the X12 Standard
- Allows the sender to specify additional information required by the receiver to perform syntax interpretation of the interchange

X12



THE ISX SEGMENT AND EDI DELIMITERS

- Use of a defined *Release Character*
- ISX01, Data Element 169
- A new syntax object (release character) added to the X12 Application Control Structure Standard
- Prevents the character immediately following its appearance from being treated as a delimiter



THE ISX SEGMENT AND EDI DELIMITERS

Example:

If the ISA segment specifies the asterisk (*) as the data element separator, and the ISX segment/ISX01 field specifies the pipe character (|) as the release character, then the EDI translator recognizes this:

|*|*THE BEST CARVING KNIFE UNDER \$100!|*|*

To mean this:

****THE BEST CARVING KNIFE UNDER \$100!****

THE ISX SEGMENT AND CHARACTER ENCODING

- Use of a *Character Encoding*
- ISX02, Data Element 170
- A new data element was added to the new ISX segment specifying the encoding of the interchange beyond the ISX Segment
- Allows use of one of 16 code values to identify the character encoding

Representing US-ASCII, EBCDIC-US, and 14 ISO standards, such as ISO 646 and ISO 8859-1



THE ISX SEGMENT AND CODE VERSIONS

- Use of X12's *Unversioned Code List* (UCL)
- ISX03, Data Element 171
- Allows the sender to specify the version of code contained in the interchange that are different from the version declared in the GS08 data element
- Requires trading partner agreement and agreement of any intermediary parties

THE ISX SEGMENT AND CODE VERSIONS

Example:

The value in GS08 of 004010 is overridden by the value 007010 in ISX03:

```
ISA*00*.....*01*SECRET.....*ZZ*SUBMITTERS.ID.*ZZ*RECEI  
VERS.ID...*200501*1253*^*00801*000000905*1*T*:~
```

```
ISX***007010~
```

```
GS*XX*SENDERCODE*RECEIVERCODE*20200501*0802*1*X*00  
4010~
```

X12 STANDARDS

GLASS

X12's Online Viewer



GLASS: MAKING ACCESS EASIER

- X12's online viewer is a powerful and convenient reference tool providing low-cost, easy access to published X12 products
- It includes all versions of the EDI Standard and many versions of implementation guides, technical reports, design rules and other reference information
- Feedback has been overwhelmingly positive, and the number of subscribers is growing steadily, with new licensees daily
- We've had approximately 700 active users viewing close to 100,000 pages this year

X12



GLASS: MAKING ACCESS EASIER

The screenshot shows a web browser window with the URL <https://products.x12.org>. The page title is "Glass | X12 PRODUCTS". On the left, there is a navigation menu under "Expand / Collapse All" with the following items: Introduction, Wordbook, X12 EDI Standard* (expanded), Code Source Directory (Appendix A)*, Design Rules and Guidelines (X12.61), X12 EDI Standard Figures*, Compliance in X12, Control Standards, Technical Report Library (expanded), Non-versioned Technical Reports (expanded), Reference Models (TR2), Clarification Papers (TR4), Versioned Technical Reports (expanded), and Implementation Guides (TR3) (expanded). Under Implementation Guides (TR3), there are three sub-items: 005010 Version, 007030 Version, and 007060 Version (2019). The main content area is titled "X12 Products" and features the heading "X12 EDI Standard*". Below the heading, it states: "An ANSI-accredited set of standardized segments and elements, organized into transaction sets and documented in the EDI Transaction Set Directory, Segment Directory and Data Element Dictionary." A note below reads: "*This product requires a **Subscription to Glass**." Underneath, it says "Select a version below:" followed by a grid of version numbers: 008010 | 007060 | 007050 | 007040 | 007030 | 007020 | 007010 | 006050 | 006040 | 006030 | 006020 | 006010 | 005050 | 005040 | 005030 | 005020 | 005010 | 004060 | 004050 | 004040 | 004030 | 004020 | 004010 | 003070 | 003060 | 003050 | 003040 | 003030 | 003020 | 003010 | 002040 | 002003 | 002002 | 002001. At the bottom of the page, there are links for "Terms | Help | Privacy Policy", social media icons for Twitter and LinkedIn, and the copyright notice "2020 © X12 Incorporated".

X12

GLASS: MAKING ACCESS EASIER

The screenshot shows a web browser window with the URL <https://standard.x12.org/Home/Default/008010>. The page title is "Glass | X12 EDI STANDARD". On the left, there is a navigation menu with a "Collapse All" button and a list of transaction sets, including "820 Payment Order/Remittance Advice" which is highlighted. The main content area is titled "820 - Payment Order/Remittance Advice" and includes a "Change Version" button. Below the title, there is a description of the transaction set and its functional group/subcommittee. A table titled "Table 1" lists the segments of the transaction set.

820 - Payment Order/Remittance Advice

FUNCTIONAL GROUP-**RA**
SUBCOMMITTEE-**F**

This X12 Transaction Set contains the format and establishes the data contents of the Payment Order/Remittance Advice Transaction Set (820) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to make a payment, send a remittance advice, or make a payment and send a remittance advice.

This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. The remittance advice can go directly from payer to payee, through a financial institution, or through a third party agent.

POS	ID	NAME	REQ	MAX	REPEAT
	0100	ST Transaction Set Header	M	1	
	0200	BPR Beginning Segment for Payment Order/Remittance Advice	M	1	
	0300	NTE Note/Special Instruction	O	>1	
C	0350	TRN Trace	O	1	
C	0400	CUR Currency	O	1	
	0500	REF Reference Information	O	>1	
	0600	DTM Date/Time Reference	O	>1	
LOOP ID - 1000					
C	0700	N1 Party Identification	O	1	>1

Terms | Help | Privacy Policy

2020 © X12 Incorporated

X12

X12 STANDARDS

BRIDGE

Syntax Neutral
Representations



METADATA VS SYNTAX

- Standardized syntax is not enough, data content must be standardized to achieve efficiencies and maximize seamless exchanges across various ecosystems
- X12's definitions of necessary and relevant content for specific business purposes (X12 metadata) have been developed and user-tested for 40+ years and can be presented in many formats and syntaxes, not just in the traditional X12 EDI Standard format that many people refer to simply as "X12"

X12



X12 BEDROCK - METADATA

- X12's metadata repository is an expansive standardized vocabulary that defines data content and describes data relationships for particular business uses
- X12's body of work is based on this approved metadata which enables consistent use within X12 products
- The X12 metadata can be mapped, or cross-walked, to related standards or applications without syntax restrictions, enhancing interoperability

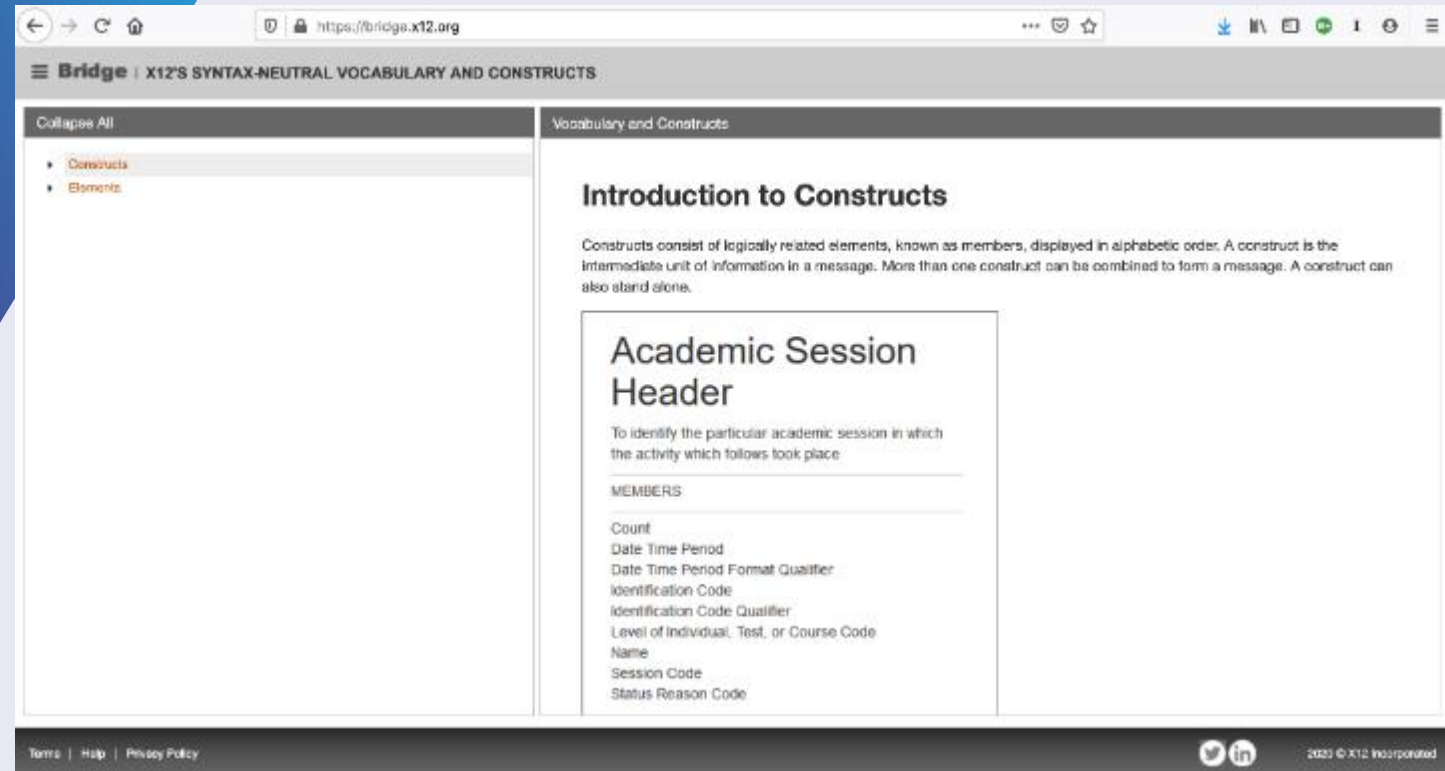
BRIDGE - SUPPORTING NEW TECHNOLOGIES WITH STANDARD CONTENT

- Standardized and well-understood metadata is the foundation that enables the successful and interoperable use of various syntaxes and delivery systems
- Pairing emerging and existing technologies in new ways presents opportunities for health care entities to better leverage the technology investments they've already made



BRIDGE: MAKING IT EASIER TO ACCESS THE METADATA

A new web resource providing a view of X12's extensive standardized metadata vocabulary in a syntax neutral form



X12

A stage spotlight is positioned in the upper left corner, casting a wide, conical beam of light onto a dark surface. The light transitions from a bright white center to a soft purple and blue glow at the edges. The text "IN THE SPOTLIGHT" is centered within the beam of light.

IN THE SPOTLIGHT

IN THE SPOTLIGHT

Online Transaction Set List

- x12.org/products/transaction-sets
- The transaction sets are listed under the subcommittee that is assigned maintenance responsibility
- Each transaction set entry can be expanded to display its purpose
- If you'd like to include an informational link to this page on your organization's website, send a request to ip@x12.org and we'll be happy to work with you



IN THE SPOTLIGHT

897 Data Synchronization

This X12 Transaction Set contains the format and establishes the data contents of the Data Synchronization Transaction Set (897) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to furnishing or requesting information pertaining to data synchronization for products or services.

X12 STANDARDS

B2X

Business to Anything



X12 EDI FOR THE 21ST CENTURY

- Retooling for the new world
- Standards as a business
- Forge new relationships
- Recognition of the small enterprise
- New opportunities
- Information and Education



FEEDBACK. IDEAS. QUESTIONS?

WE WANT TO HEAR IT ALL,
TELL US AT
[X12.ORG/FEEDBACK](https://x12.org/feedback)

X12



STAY CONNECTED

→ Learn more about X12 at X12.org

→ Stay informed by following X12

 *@x12standards on Twitter*

 *#X12 on LinkedIn*

