



Claims Attachments and HIPAA

The HIPAA
Colloquium at
Harvard University

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About your presenter...

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Today's Agenda

- ❖ Attachments – How we got here
- ❖ X12 + HL7 = Claims Attachment
- ❖ HL7 Brief Technical Overview
- ❖ Architectures for Compliance

NPRM Process

- **Testimony at NCVHS - 1998**

- ✓ NCVHS recommendation(s) to HHS

- **Draft NPRM**

- ✓ Industry input:

NCVHS, WEDI, NUCC, NUBC, ADA

- ✓ Implementation teams

- **Internal Clearance process**

- ✓ CMS & HHS



Proposal Selection Criteria

- **Similar to the approach used to select the original HIPAA transactions:**
 - ✓ Outreach to identify with subsequent review of available standards to select defacto standard, if possible
 - ✓ Integrate well with existing HIPAA standards
 - ✓ Adhere to the selection guidelines regarding: technology neutral, ANSI accredited, ultimately reduce admin cost



Selection Results

- **Defacto standard for Claims Attachments did not exist**
- **The health care clinical information domain belonged to Health Level Seven (HL7)**
- **HL7 membership represents the expertise for clinical standards development -- both provider and vendor**
- **HL7 is ANSI accredited, technology neutral**



Claims Attachment NPRM Status

- **NPRM for Claims Attachments**
 - ✓ CMS clearance completed
 - ✓ In HHS Department Clearance
 - ✓ Then to OMB – up to 90 days to approve
 - ✓ NPRM published
 - ✓ Public comment period – 60 days?



NPRM process

- **NPRM for Claims Attachments Con't**
 - ✓ Anticipated date in Federal Register is ...
 - ✓ Public Comment period – need to read all materials included
 - ✓ HHS response to all comments
 - ✓ Modifications to implementation guide and other documents based on comments
 - ✓ Issuance of Final Rule



Attachments - Past

- WEDI Attachment Workgroup Report, 1994
- Recommendations:
 - ✓ Standardize attachment data elements
 - ✓ Coordinate affected entities to develop guidelines
 - ✓ Work with Medicaid to standardize/eliminate attachments
 - ✓ Develop 274/275 as primary vehicle
 - ✓ Create standard way to link data across transaction sets



Attachments - Past

NUCC:National Uniform Claim Committee (NUCC) Survey, 1996

- ✓ Survey to Blues & Medicare contractors asking what attachments are utilized?
- ✓ COB, SNF, Therapies, DME, Surgery
- ✓ 54 responses - no follow-up conducted as NUCC need to focus on 1500 dataset

HCFA Surveys to Medicare Carriers and Intermediaries, 1996 / 1997

- ✓ Results led to funding 275 POC



Attachments - Past

- **Proof of Concept (POC) Team**

- ✓ 5 Medicare contractors funded by HCFA to develop Electronic Request for Information
- ✓ 1997 began considering options for Claims Attachments as response to request - April 1997 approached HL7
- ✓ August 1997 POC Team joined HL7 and helped to form ASIG
- ✓ ASIG solicited industry input before moving forward



Attachments - Past

Recommendations from industry outreach

- ✓ Determine most frequently used Attachments
- ✓ Consider Attachments where HL7 messages already exist / in development
- ✓ Need to “Standardize” the questions payers ask
- industry consensus required
- ✓ Form “Attachment workgroups” by soliciting help from all sectors of industry (e.g. payers, providers, National Associations)
- ✓ Use LOINC codes



Attachments - Past

- **HL7 proposed for use in Attachment transaction**
 - ✓ Only ANSI accredited standard focusing on clinical processes
 - ✓ X12 275 transaction has BIN segment allowing for inclusion of other standards
 - ✓ HL7 already had much of the work done (i.e. relevant segments, codes, fields already existed)
 - ✓ LOINC supported by HL7



Attachments - Past

- **LOINC vs. Claim Status reason Codes**
 - ✓ POC pilot in 1996 revealed that Claim Status Reason Codes were not effective in requesting information from providers
 - ✓ LOINC already had many codes needed for Claims Attachments
 - ✓ LOINC codes provide necessary granularity
 - ✓ LOINC consortium was very accommodating regarding special code requests
 - ✓ Free mapping tool for LOINC database



Attachments - Past

- Attachment types ultimately selected for development and HIPAA recommendation:
 1. Ambulance
 2. Emergency Department
 3. Rehabilitative Services
 4. Lab Results
 5. Medications
 6. Clinical Notes



Attachments - Present

- Development of next Claims Attachments:
 - ✓ Home Health
 - Workgroup underway, much progress made
 - ✓ Durable Medical Equipment (DME)
 - ✓ Several Medicaid driven attachments
- ASIG expanded to develop attachments for X12N 278 transaction (pre-cert / pre-auth)
- ASIG membership continues to grow



X12 + HL7 = Claims Attachment

- **X12 (SDO)**

- X12N Insurance
 - TG2 Healthcare
 - WG 9

- **Transaction Sets**

- 275
 - segments
 - fields

- **HL7 (SDO)**

- (HL7)
 - Orders TC
 - CA SIG

- **Messages**

- ORU
 - segments
 - fields

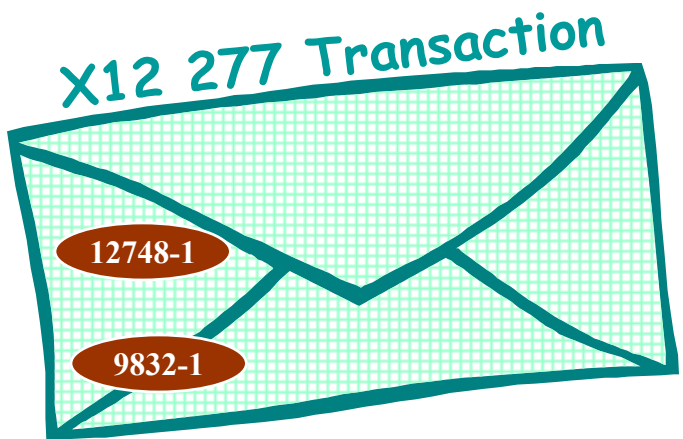


Organizations and Documents

**ASC X12 &
Subcommittee
X12N**

**X12
Trans.
Sets
277, 275**

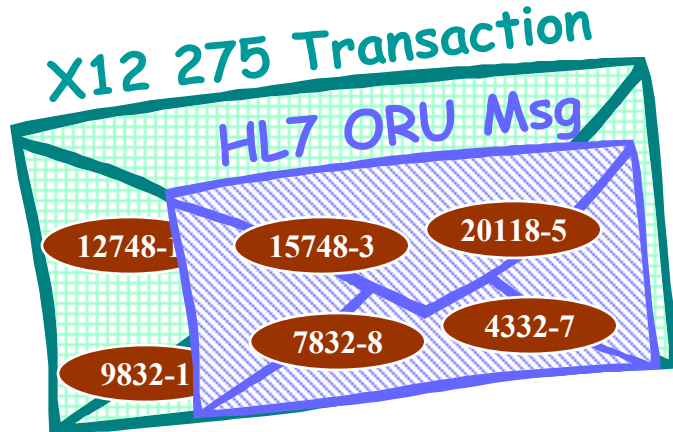
**X12N Impl.
Guides
277, 275**



**Health Level
Seven**

**HL7
Version
2.4**

**HL7
Claims
Attachments
Impl.
Guide**



**LOINC
Consortium**

**LOINC
Codes**

**LOINC
Attachment
Booklets**

Full Documentation Suite

- **X12 Implementation Guides**

- ▶ **ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter**
- ▶ **ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information**

- **HL7 Implementation Guide**

- **HL7 LOINC Code Booklets**

- **Other**

- ▶ **Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction**
- ▶ **LOINC Codes for the HL7 and X12 Additional Information to Support a Healthcare Claim or Encounter Transactions: Summary Listing**

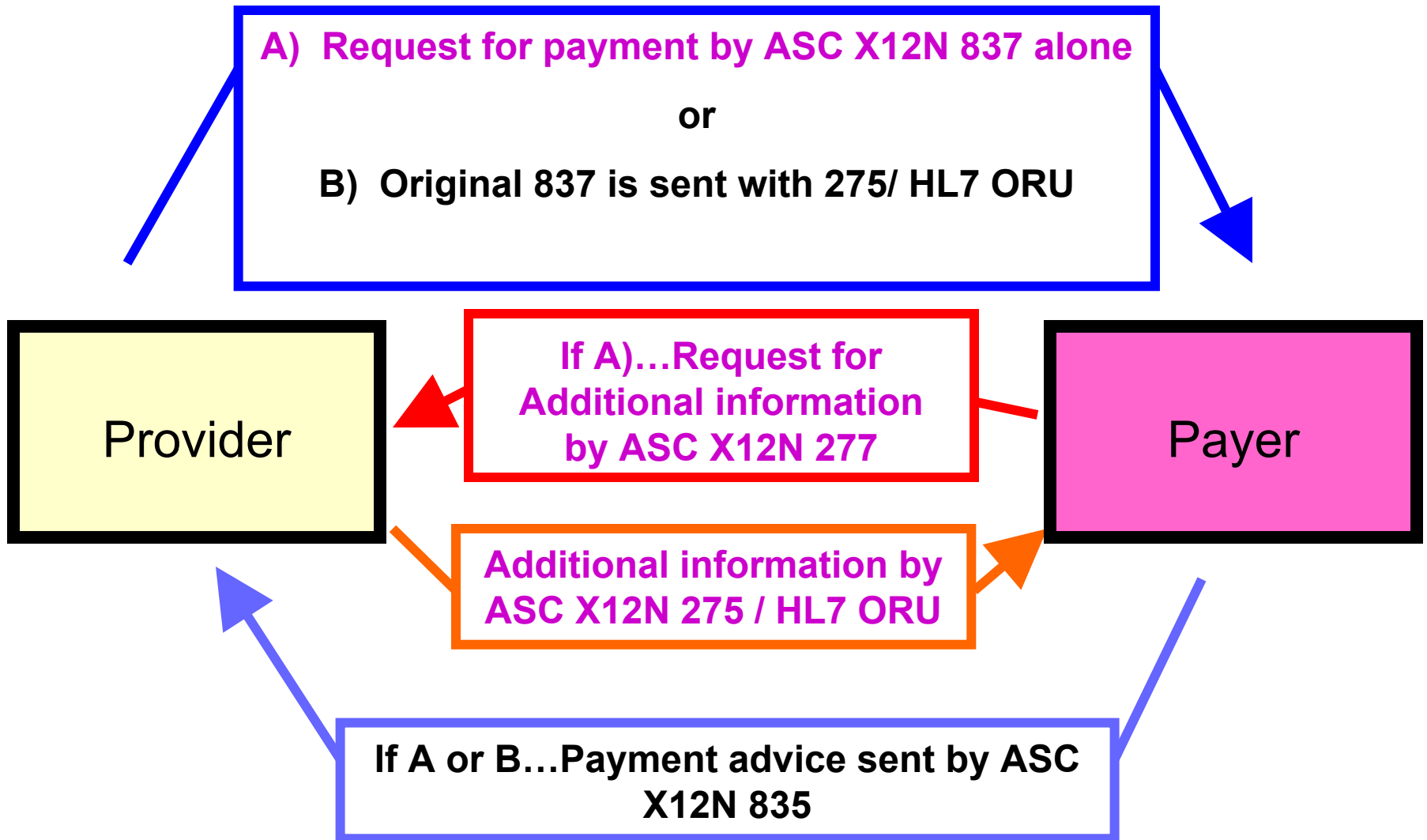


Claim Attachment Transaction Relationships

- **Transactions involved in Claims Attachments**
 - ✓ 837 (claim) + 275(patient info)
+ HL7 ORU
 - ✓ 277(info request) + 275/HL7 ORU
 - ✓ 997 (functional acknowledgment)
- Attachments can be sent with the original claim or in response to a payer's request for information



The concept moves information electronically between the provider and the payer



Claim Attachment

Transaction usage requirements

- Provider has choice to:
 - ✓ Request 277 from payer
 - ✓ Respond to request via 275/HL7
- Payer has responsibility to:
 - ✓ Create a 277 when provider elects to receive
 - ✓ Receive & process a 275 / HL7 when provider elects to send it
- Payer & provider mutually agree to use 997



Linking the Transactions same transmission

Attachment submitted with Claim (837 + 275)

ISA Interchange Control Header

GS Functional Group Header

ST 837 Transaction Set Header: Claim

...PWK contains *provider's control number*

SE Transaction Set Trailer

GE Functional Group Trailer

GS Functional Group Header

ST 275 Transaction Set Header: Add'l Info

...TRN contains *provider's control number*

SE Transaction Set Trailer

GE Functional Group Trailer

IEA Interchange Control Trailer



Linking the Transactions

separate transmissions must be paired

Attachment Request

from the Payer

| | |
|---------------|--|
| ISA | Interchange Control Header |
| GS | Functional Group Header |
| ST 277 | Transaction Set Header: Request |
| ...TRN | contains <i>payer's control number</i> |
| STC | <i>specific data requested</i> |
| SE | Transaction Set Trailer |
| GE | Functional Group Trailer |
| IEA | Interchange Control Trailer |

Attachment Response

from the Provider

| | |
|---------------|--|
| ISA | Interchange Control Header |
| GS | Functional Group Header |
| ST 275 | Transaction Set Header: Response |
| ...TRN | contains <i>payer's control number</i> |
| STC | <i>specific data requested</i> |
| ...BIN | <i>specific data response</i> |
| SE | Transaction Set Trailer |
| GE | Functional Group Trailer |
| IEA | Interchange Control Trailer |

History of HL7

- Founded 1987
- Membership: near 2000
- Goal: Exchange of clinical and clinical-administrative information
- US ANSI Accreditation 1995
- 18 Affiliate chapters in 30 + Countries
- US Market penetration:
 - Hospitals > 90%
 - Other care delivery organizations: no competing standard



Attachment Principles

- Structured Data
 - ✓ Usable now, support the smarter processing over time
- HL7 authority
 - ✓ not to specify *what* data is sent
 - ✓ to specify *how* it is encoded in HL7
- Fully specified
 - ✓ No trading partner agreements
- ANSI accredited HL7 V2.4
- Implementation Guide stable for one year per HHS requirements
- Responsive to need for addition of new attachment forms



LOINC Codes

- **What is LOINC?**
 - ✓ Logical Observation Identifier Names and Codes
- **Why LOINC and not Health Care Claim Reason Codes as in the Claims Status Notification (277)?**
 - ✓ Specificity & Flexibility
 - ✓ Supported by HL7
 - ✓ Comprehensive database structure to support & free mapping tool



LOINC Codes

- **Logical Observation Identifier Names and Codes**
- **Universal names and ID codes for identifying**
 - ✓ laboratory and clinical test results
 - ✓ All other information meaningful in claims attachments
- **Freeware**
- **Owned by**
 - ✓ Regenstrief Institute
 - ✓ Logical Observation Identifier Names and Codes (LOINC) Consortium



Key components of the transaction

If the request is for Rehab treatment, progress notes, and goals, and the **LOINC** set is used, it is expressed

STC*R4:18658-5::LOI~

Key components of the transaction

With Reason Codes, must use 3 STCs

| | |
|----------------|----------------------|
| STC*R4:310:3F~ | 310=6 months prior |
| STC*R4:436:3F~ | 436=short term goals |
| STC*R4:437:3F~ | 437=long term goals |

Conceptual Approach

Electronic Attachment *LOINC Code*

Element
LOINC Code Answer Part *LOINC Code*

Answer Part *LOINC Code*

Element
LOINC Code Answer Part *LOINC Code*

Element
LOINC Code Answer Part *LOINC Code*

Answer Part *LOINC Code*

Answer Part *LOINC Code*

Emergency Dept Attachment

Emergency Dept

30053-0

Respiratory Rate

11291-2

Respiratory Rate (NM)

11291-2

Body Temp

11289-6

Body Temp (NM)

11289-6

Temp Reading Site (CE)

11290-4

...

...

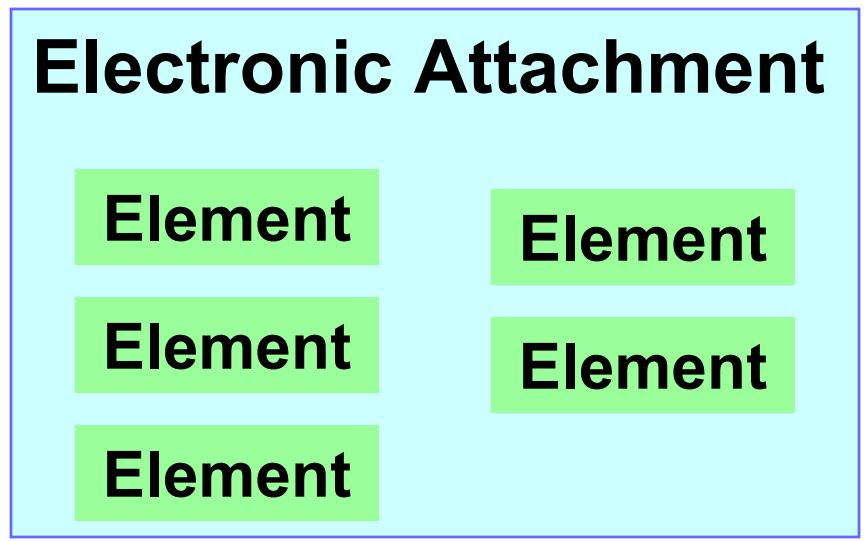
277 Questions & 275 Answers

- **A 277 asks for**

- Attachments

or

- Elements



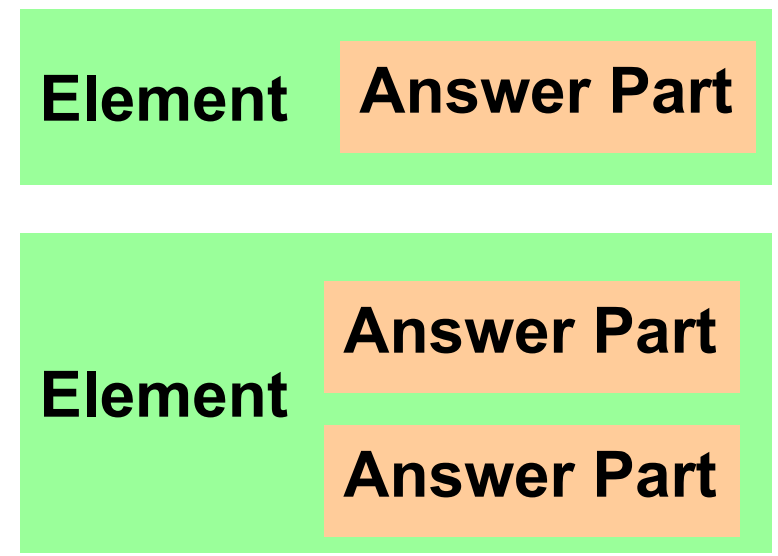
- By sending **LOINC**

- **A 275 sends**

- Elements

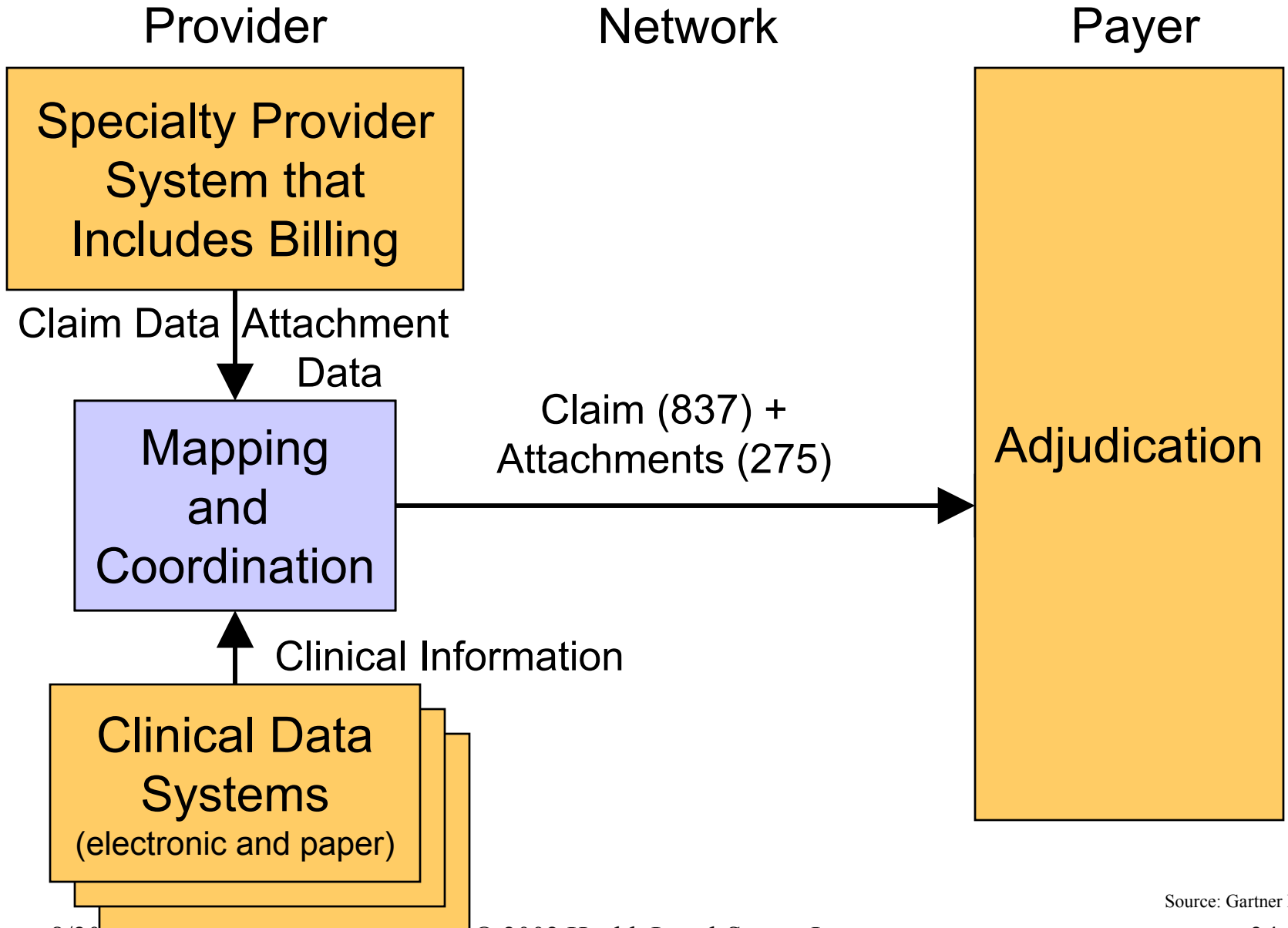
consisting of

- Answer parts



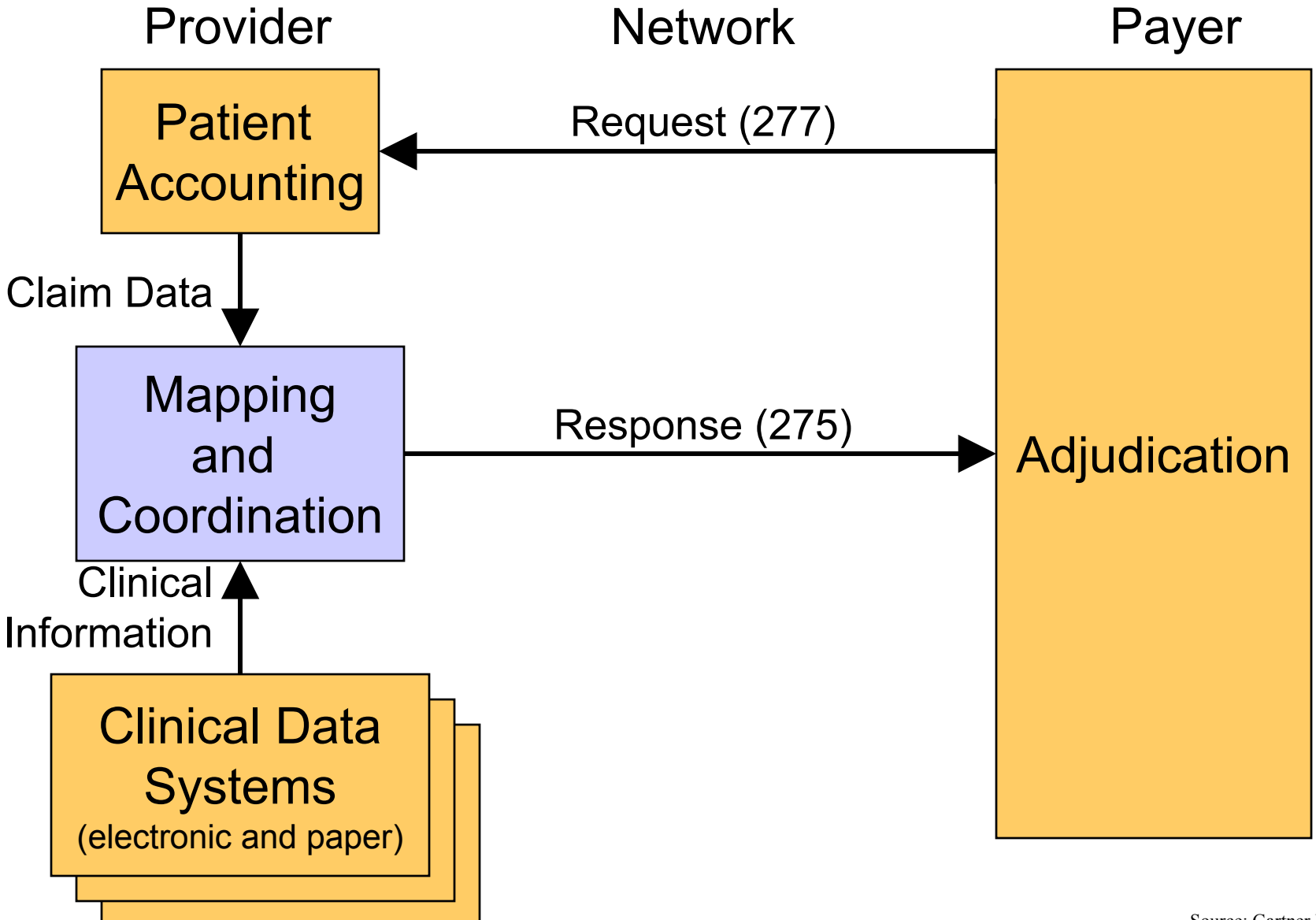
- Identified by **LOINC**

Architecture--Providers, Prospective



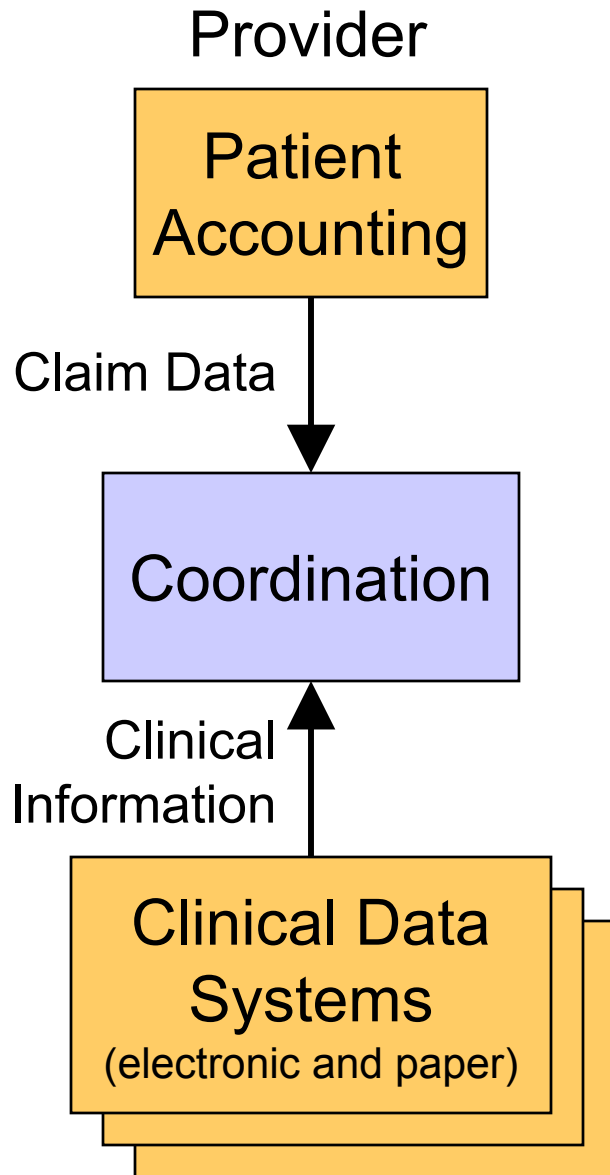
Source: Gartner Research

Architecture--Providers, Ad Hoc



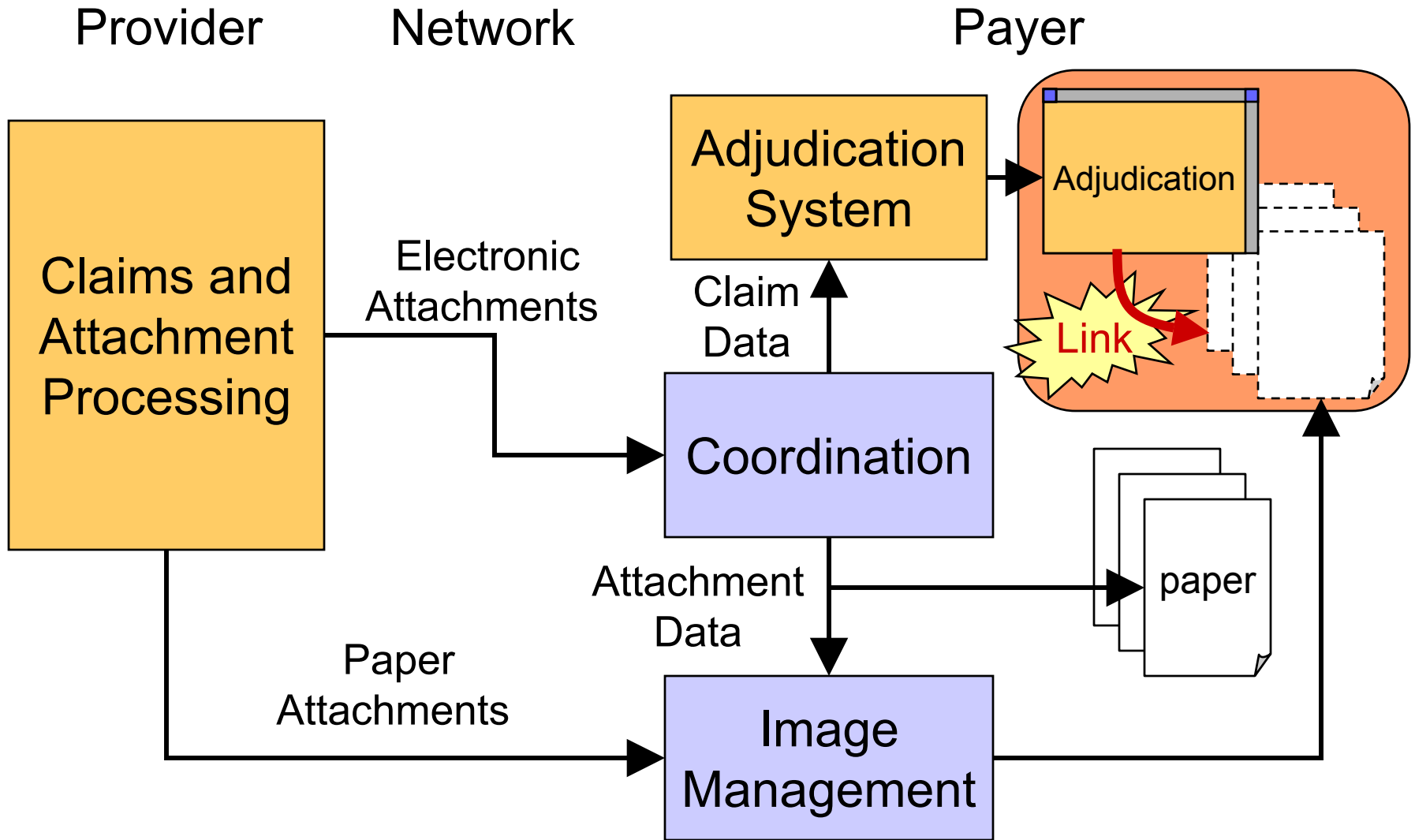
Source: Gartner Research

Provider Coordination Function

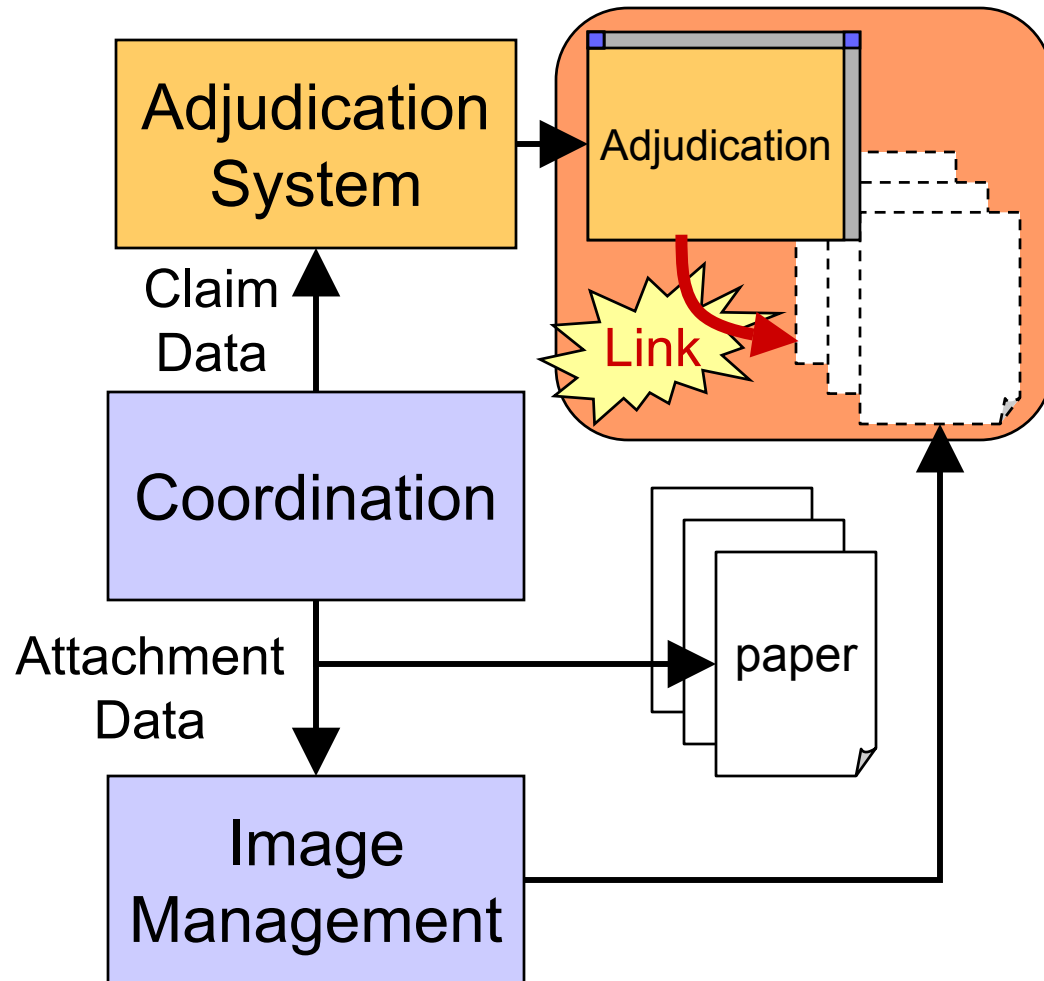


- **Manual function**
 - Can be enhanced by automated support
 - Subject to the judgement of a person
- **Mapping software creates the combined 275-ORU message**
- **Revision for images**
 - fax-quality scanned images
 - portions of attachments that would otherwise be sent as unstructured textual reports
 - each scanned portion of a document is in an OBX with a specific LOINC code
 - valuable for providers that have image-based electronic medical record systems
 - valuable for small providers that have no on-line storage of medical record systems

Payer Architecture: Quick Benefits

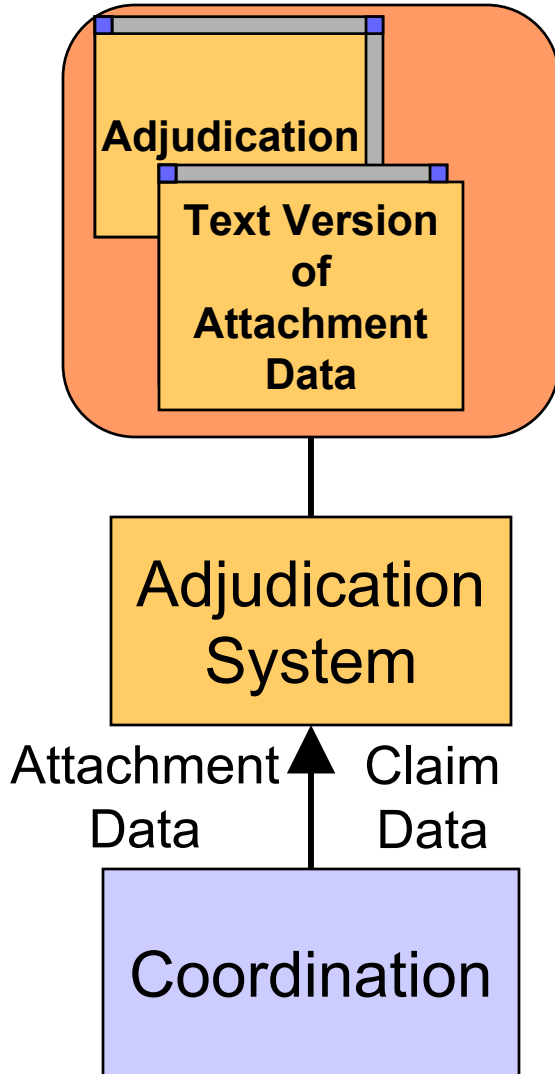


Payer Coordination System



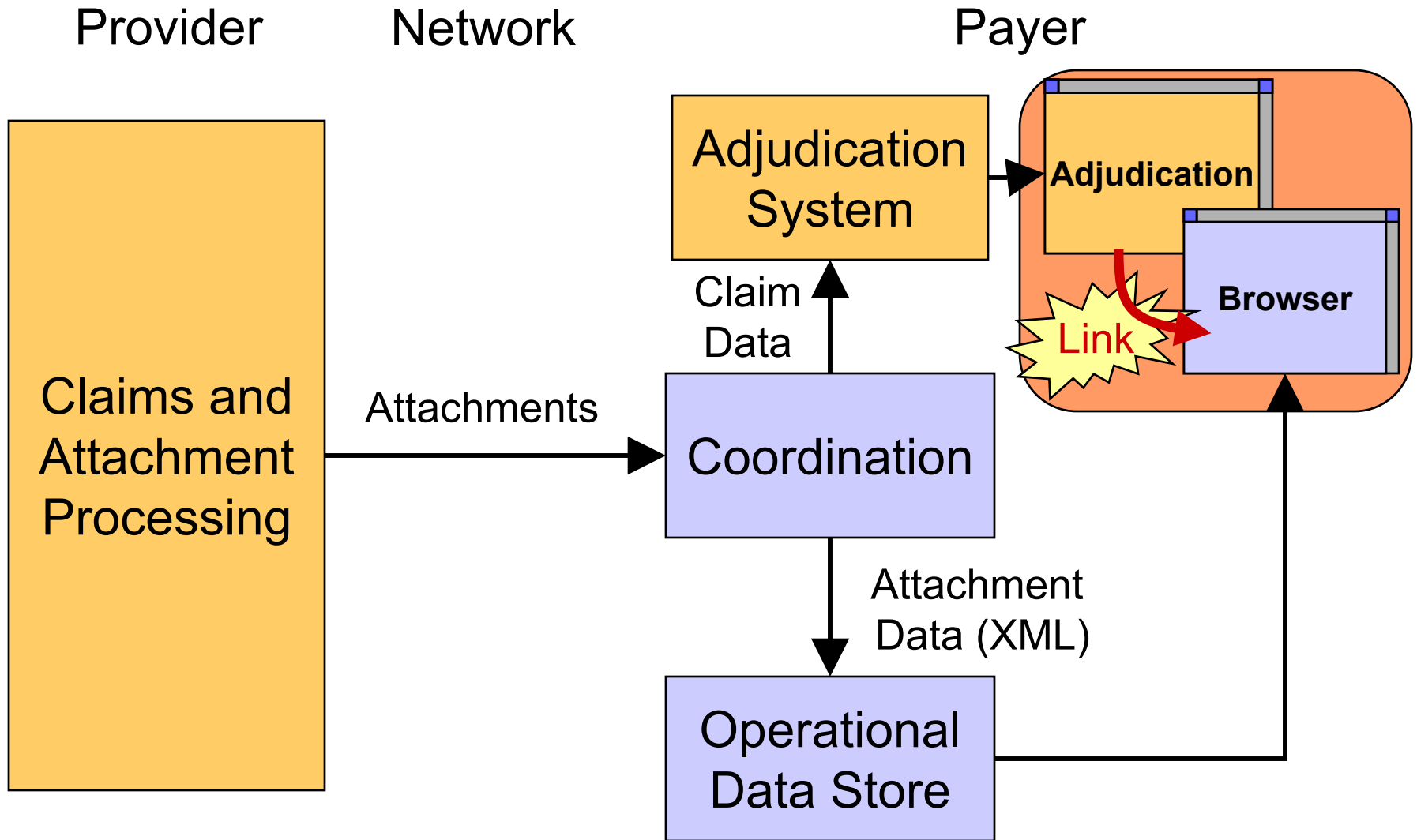
- **Convert structured data to print image**
- **Print if required**
- **Create various ID fields for image management**
- **Notify adjudication system of receipt of requested attachment**

Quick Payer Architecture #2

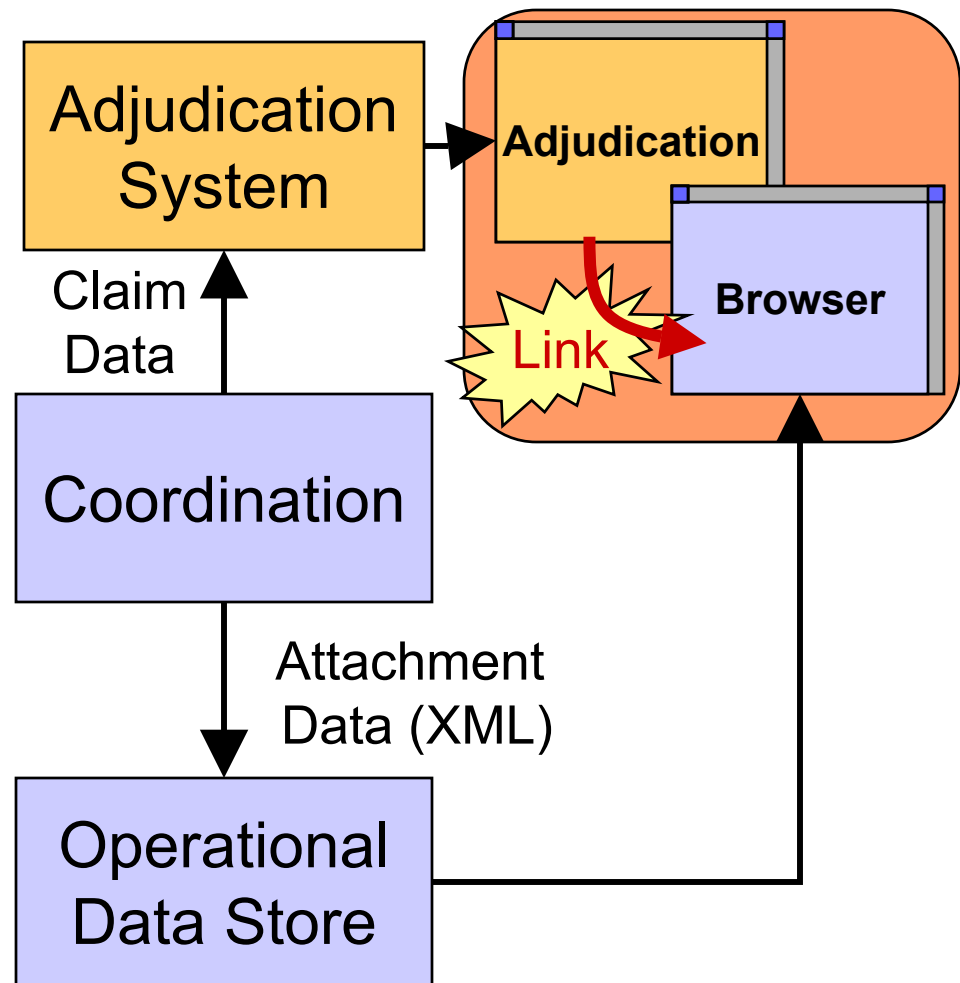


- **Requires minimal remediation of the adjudication system**
- **Recommended where document image management system is not in use**

Quick Payer Architecture #3

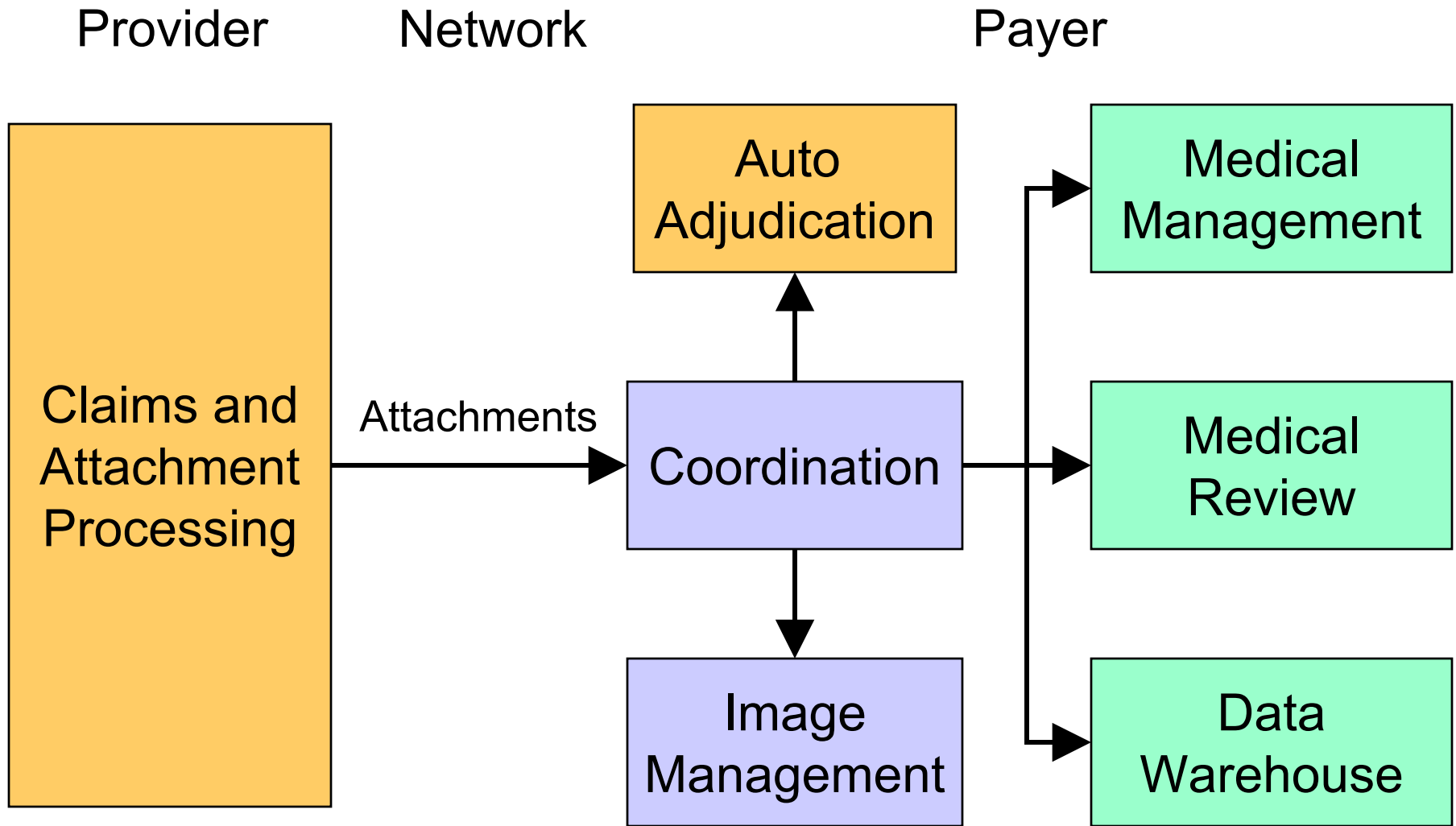


Payer Coordination System #3



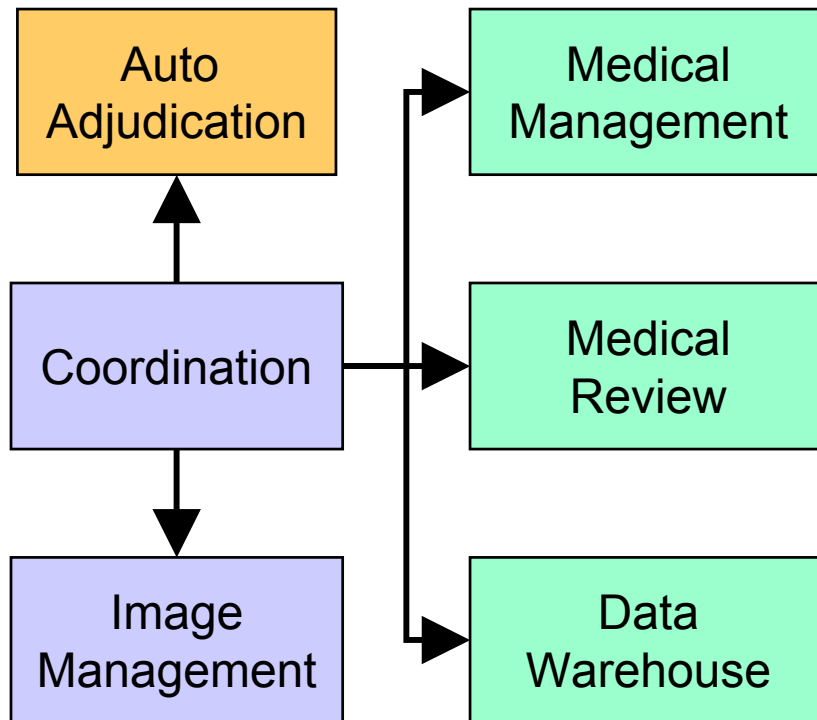
- **Convert attachment data into XML documents or other data format**
- **Create various ID fields for image management**
- **Notify adjudication system of receipt of claim attachment**
- **Store hyperlinks to the XML documents.**

Payer Architecture: Best Benefits



Coordinator for Best Payer Benefits

- **Routing and mapping of structured data**
- **Notification of arrival of claims data**



“Best possible” handling of unstructured text and image data because LOINC codes are still used

Conclusions for Providers

- **Standardized claims attachments and the LOINC code structure and enable automatic and semi-automatic assembly of attachments**
- **Providers opt into electronic claims attachments initially to take advantage of standardized payer questions, to expedite payment of pended claims, and to save people, paper, and postage costs**
- **Provider savings grow dramatically with the use of a CPR -- indeed, attachments may help to justify the cost of a CPR**
- **The TRICK is getting short term benefits without jeopardizing the long term**



Conclusions for Payers

- **Payers wishing to minimize entry costs can adopt claims attachments with few changes to existing systems**
- **Initial payer process savings can be achieved with limited investment through minimal integration with document image management systems**
- **Payer savings grow dramatically with sophisticated use of structured data and standardize claim to improve adjudication and downstream processes**
- **The TRICK is getting short term benefits without jeopardizing the long term**



More Information

- **HL7 official Web site**
 - general information/link to ASIG
 - <http://www.hl7.org>
- **Washington Publishing Company (HIPAA Implementation Guides) – includes *all* materials related to Claims Attachments**
 - <http://www.wpc-edi.com>

Questions... or to participate:

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