

# HIPAA Transactions and Code Sets

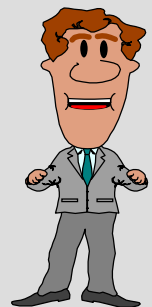
## A Technology Driven Approach to Improving Healthcare Data Quality

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*Intelligently Linking Information Systems*

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- Consultant -- Healthcare Interfaces and EDI
- Member, Accredited Standards Committee X12 and its Insurance Subcommittee (X12N)
- Member, Health Level Seven (HL7)
- Co-Chair, X12N HIPAA Implementation Work Group
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- Member, HL7 Imaging Integration Special Interest Group (IISIG) and DICOM Image Integration Group (WG20)
- Member, concluded HL7 Master Person Index Mediation Special Interest Group (MPISIG)
- Commercial and Technology Arbitrator, American Arbitration Association



# Long-Standing Industry Status

July, 2000, NCVHS Report reiterated

- Limited interoperability of health information systems
- Limited comparability of data exchanged among providers
- Need for better quality, accountability, and integrity of data

source: <http://www.ncvhs.hhs.gov/hipaa000706.pdf>

# Original Industry Objective

Through the standardization of data elements, codes, and identifiers for electronic transactions and attachments, establish a new baseline for using computing and automation to further improve healthcare ...

⇒ effectiveness

⇒ affordability

⇒ profitability

# HIPAA Nomenclature

Title II, Subtitle F -- **Administrative Simplification**

of the

Health Insurance Portability and Accountability Act  
of 1996 (HIPAA)

*a.k.a.* **Public Law 104-191**

*a.k.a.* H. R. 3103

*a.k.a.* Kennedy-Kassebaum Bill

*which amends*

Part C of Title XI of the Social Security Act

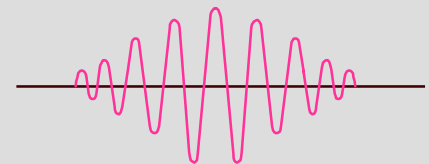


# Administrative Simplification

- **National standards for efficient and electronic administrative and financial health care transactions**
- Recommendations, and ultimately, regulations for privacy legislation
  - Congress had until August, 1999, to act
  - DHHS issued regulation independently
- Recommendations for electronic medical records

# HIPAA Electronic Standards

- National Identifiers
- Explicit Code Sets
  - Medical
  - Other
- Standard Transactions
- Claims Attachments



# HIPAA National Identifiers

- Employer

IRS' EIN a *shoo-in*

- Provider

projected to be 10 digits using new unified provider enumeration system (NPS)

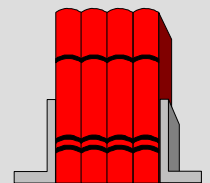
- Health Plan

probably will be similar to the CMS (nee' HCFA) PayerID / PlanID proposal of mid-1990's -- 10 digits

- ~~Individual~~

# HIPAA Medical Code Sets

- Explicitly specified in regulation
  - Diagnoses -- ICD-9-CM
  - Procedures
    - Physician Services -- CPT-4 and CDT-3
    - Inpatient Services -- ICD-9-CM
    - Other Services -- HCPCS, without “D”, “J”, and local codes
    - Drugs -- NDC [and HCPCS “J” codes]
    - Other Items -- HCPCS



# Other HIPAA Code Sets

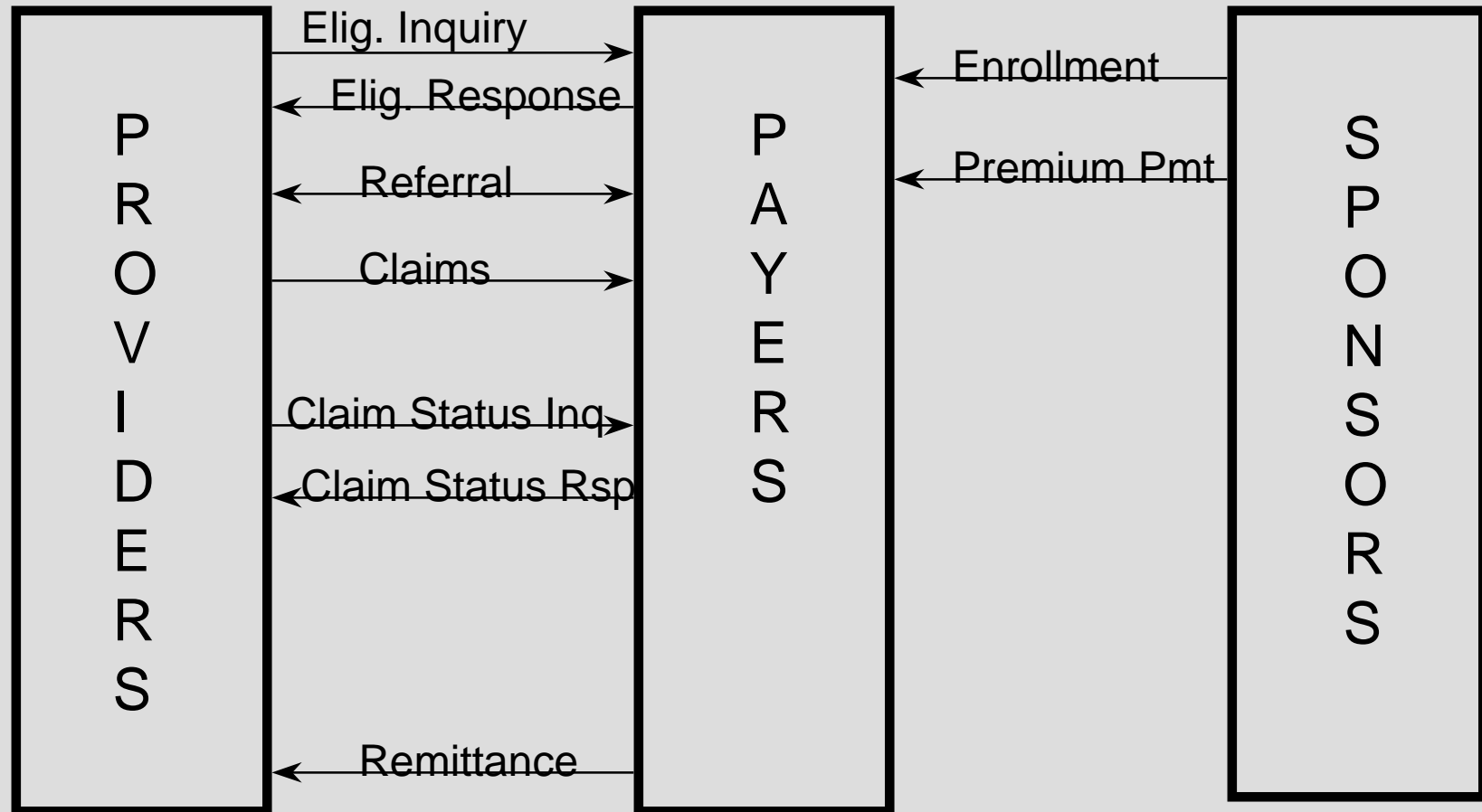
- Defined by, for example,
  - Implementation Guides themselves, for example,
    - Individual Relationship
    - Claim Filing Indicator
    - Condition Indicator
  - CMS [formerly HCFA], for example,
    - Health Care Service Location
    - Diagnosis Related Group Number (DRG)

continued ...

# Other HIPAA Code Sets

- Defined by, for example,
  - Data Content Committees, for example,
    - NUCC: Health Care Provider Taxonomy
    - NUBC: Revenue Codes, Admission Source Codes
  - Other External Code Sources, for example,
    - Claim Status and Adjustment Reason Codes
    - Postal Service
    - International Standards Organization (ISO)
    - Logical Observation Identifier Names and Codes (LOINC)

# HIPAA-1 Transactions



# Transactions and Code Sets

- Mandatory Federal Regulations [“Rules”]

*which promulgate*

- Voluntarily adopted

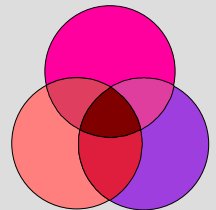
**Implementation Guides** {X12N}

*which define precise uses of*

- Voluntarily adopted ANSI Standards {X12}

# HIPAA Implementation Guides

- One for each specified transaction
- Use common data element definitions across all transactions that precisely specify
  - data type -- alpha, alphanumeric, ID
  - field width -- minimum and maximum
  - allowable values or populating code set

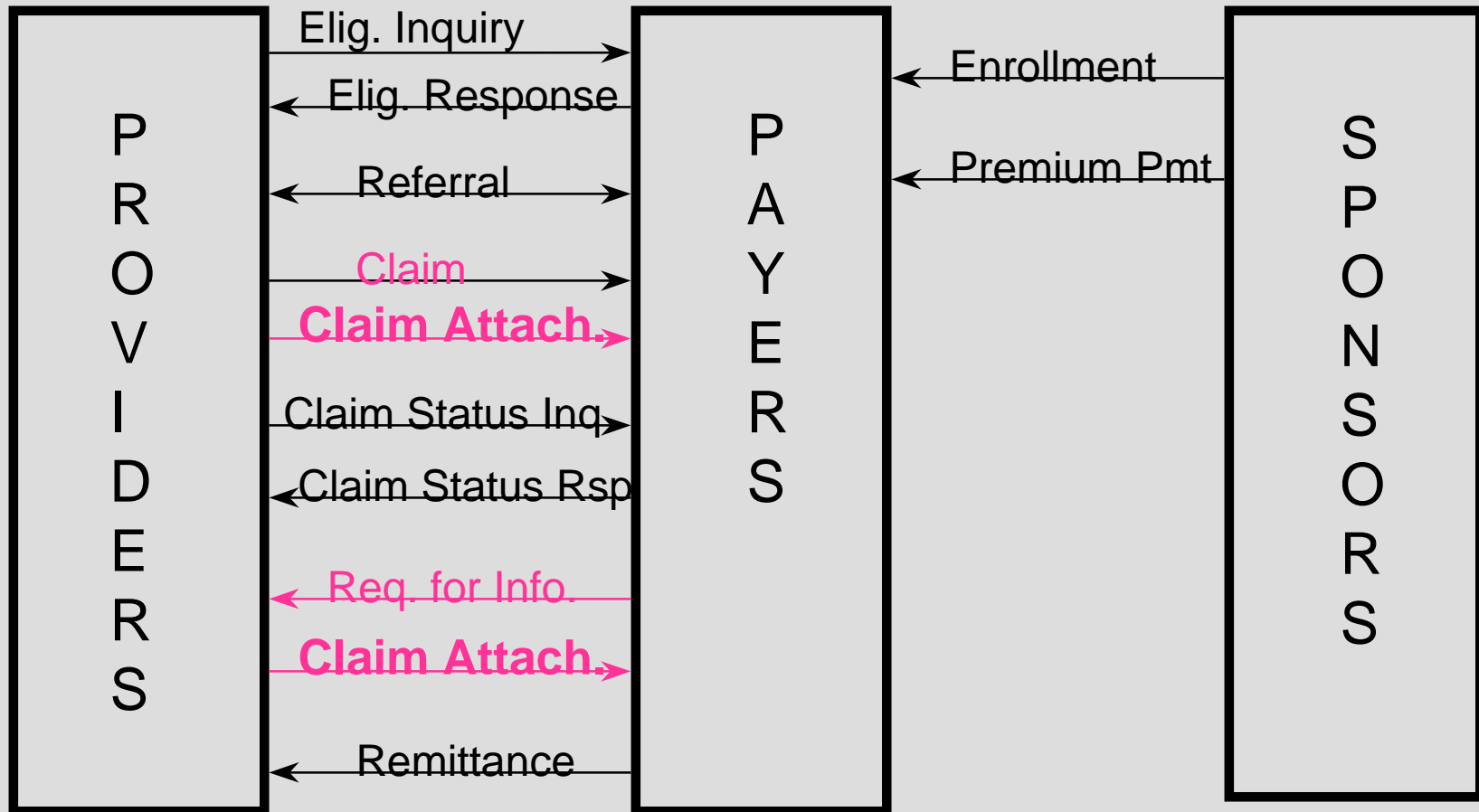


# HIPAA Implementation Guides

## Data Element Definition Examples

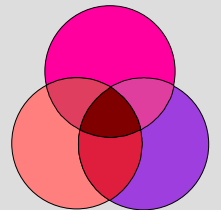
Data Element	Name	Attributes
1035	Name Last	AN 1/35
1036	Name First	AN 1/25
1037	Name Middle	AN 1/25
19	City Name	AN 2/30
156	State or Province Code	ID 2/2
116	Postal Code	ID 3/15
...		

# HIPAA Claims Attachments



# HIPAA Attachment Booklets

- One for each attachment type
- Use common content identification codes across all attachment types
  - Attachment data content is coded using only the Logical Observation Name Identifiers and Codes (**LOINC**) code set  
reference: [www.regenstrief.org/loinc/loinc.htm](http://www.regenstrief.org/loinc/loinc.htm)



# HIPAA Attachment Booklets

## Content Identification Examples

- First Claims Attachments NPRM is anticipated to define six attachment types
- One of the six, the **Rehabilitation Services** attachment type, defines nine rehabilitation treatment plans, such as ...

LOINC

Treatment Plan

18823-5

Alcohol-substance abuse rehabilitation

18594-2

Psychiatric rehabilitation

...

# HIPAA Attachment Booklets

## Content Identification Examples

- The **Alcohol-Substance Abuse Rehabilitation** treatment plan attachment is composed of up to 34 specific, individually coded, data elements, such as ...

<u>LOINC</u>	<u>Description</u>
27474-6	Treatment plan, new/revised
27515-6	Primary diagnosis
27478-7	Author of treatment plan
27482-9	Visit frequency
...	

# HIPAA Attachment Booklets

## Content Identification Examples

- The **Psychiatric Rehabilitation** treatment plan attachment is composed of up to 26 specific, individually coded, data elements, such as ...

<u>LOINC</u>	<u>Description</u>
18626-2	Treatment plan, new/revised
19007-4	Primary diagnosis
18632-0	Author of treatment plan
18637-9	Visit frequency
...	

# So what does all of this buy us?



# Technology Drives Quality

- Common identifiers
  - Precise identification of subjects within roles -- except for individuals as patients
  - Reduced ambiguity in processing
  - Ultimately, convergence of multiple underlying computing systems to internally use standard identifiers

# Technology Drives Quality

- Common code sets
  - Aligned terminology and meaning -- particularly for clinical data
    - e.g., alcohol-substance abuse treatment plan
    - vs. psychiatric treatment plan
    - vs. \_\_\_\_\_ treatment plan
  - Comparability of data
  - Ultimately, convergence of multiple underlying computing systems to internally use standard code sets

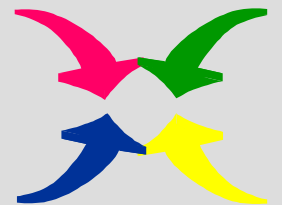
# Technology Drives Quality

- Consistent data fields
  - Common understanding of field widths -- particularly for key variable length information
    - e.g., name, address, chief complaint
  - Reduced information loss via truncation
  - Ultimately, convergence of multiple underlying computing systems to internally use standard data field widths and data types

# Technology Drives Quality

Ultimately, over a period of many years, the myriad of computing systems used to provide and pay for healthcare will be enhanced, upgraded, and/or rewritten to internally adopt the underlying portions of today's HIPAA Transactions and Code Sets standards,

leading to ...



# Technology Drives Quality

- The original technical objective of HIPAA Administrative Simplification
  - Improved interoperability of the information exchanged by health information systems
  - Very high comparability of the information exchanged in the health care industry
  - Concomitant improvement in overall information quality, accountability, and integrity



# HIPAA Transactions and Code Sets

- Further Information

- HIPAA Glossary

- [www.wedi.org/htdocs/resource/hipaa\\_glossary.pdf](http://www.wedi.org/htdocs/resource/hipaa_glossary.pdf)

- HIPAA Standard Transactions and Data Element Definitions

- X12 [www.wpc-edi.com/hipaa](http://www.wpc-edi.com/hipaa)

- NCPDP [www.ncpdp.org](http://www.ncpdp.org)

- HL7 [www.hl7.org](http://www.hl7.org)

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