

Med Inf 405

Session 5 - Study Questions and Answers

1. Can a healthcare clearinghouse accept and send non-standard HIPAA transactions?

Yes, Healthcare clearinghouses are an exception. A clearinghouse would be able to accept nonstandard transactions for the sole purpose of translating them into standard transactions and would be able to accept standard transactions and translate them into nonstandard formats for receiving customers. The transmission of nonstandard transactions, under contract, between a health plan or a healthcare provider and a healthcare clearinghouse would not violate the law.

2. What is the difference between a de jure standard and a de facto standard?

An official standard is de jure, while those which arise by practice are de facto standards. A de jure standard should be impartial in the sense that it should not give exclusive advantage to the product or service of any individual supplier.

3. What harm can be caused by standardizing too soon and by standardizing too late in areas of rapid development?

Standardizing too soon can inhibit innovation. Standardizing too late can cause wasteful or mutually incompatible solutions.

4. What is the difference between basic interoperability, functional interoperability, and semantic interoperability?

Basic - Allows a message from one computer to be received by another but does not expect the information to be interpreted

Functional (intermediate level) – Defines the syntax of a message. Ensures that messages can be interpreted at the level of data fields. One system that has a field named “Ear Exam” can expect the receiving system to have the same field.

Symantic – Requires that information can be used intelligently and takes advantage of both the structuring and codification of the data within the fields. Thus “Ear Exam” may have an attribute of “Inflammation” with a value of “Positive” and this could trigger reactions in the receiving computer.

5. What principles are used to guide choices for HIPAA standards?

(1) Improve the efficiency and effectiveness of the healthcare system. (2) Meet the needs of healthcare providers, health plans, and healthcare clearinghouses. (3) Be consistent and uniform with the other HIPAA standards. Their data element definitions and codes and their privacy and security requirements – and, secondarily, with other private and public sector health data standards. (4) Have low additional development and implementation costs relative to the benefits of using the standards. (5) Be supported by ANSI-accredited standards developing organization or other private or public organization that will ensure continuity and efficient updating of the standard

over time. (6) Have timely development, testing, implementation, and updating procedures. (7) Be technologically independent of the computer platforms and transmission protocols used in electronic transactions, except when they are explicitly part of the standard. (8) Be precise and unambiguous, but as simple as possible (9) Keep data collection and paperwork burdens on users as low as is feasible (10) Incorporate flexibility to adapt to changes in the healthcare infrastructure and information technology. (11) Support patient privacy and information quality.

6. What do X12N implementation guides stipulate specific usage of?

Transaction set segments and data elements.

7. What types of transactions are mandated by HIPAA to have standards?

- Health claims and equivalent encounter information
- Enrollment and disenrollment in a health plan
- Eligibility for a health plan
- Health care payment and remittance advice
- Health plan premium payments
- Health claim status
- Referral certification and authorization
- Coordination of benefits
- Claims attachment

8. What criteria does the ASTM give for good coding systems?

(1) Concepts are clearly defined and the concepts do not overlap with one another. Plus the set of concepts covers all the necessary concepts of the intended scope of the vocabulary (2) Structured relationships among the concepts facilitate the use of the concepts in indexing and retrieval. (3) The coding system is designed so as to readily support refinement across time.

9. Are HIPAA standard transactions allowed to contain local codes?

No, with the final ruling, all local codes must be eliminated. Users that need codes must apply to the appropriate organization (HCFA for HCPCS, AMA for CPT-4 codes) for national codes. Local codes are a source of confusion.

10. What types of entities are required to have a national identifier in relation to HIPAA standard transactions?

Providers need to have a NPI and employers need to have a EIN.

11. How much is the savings per healthcare claim processed electronically instead of manually?

\$1 per claim for health plans and physicians and
\$.75 per claim for hospitals and other healthcare providers.

12. What are the responsibilities of the project management office when implementing the HIPAA transactions rule?

Coordinating documentation activities and initiating change management through the organization. Roles and responsibilities include Project Manager (organizational change); information systems manager (information systems architecture); operations manager (claims, eligibility, referral and patient accounting); business office expert (document current workflows and new workflows for automated solution; human resource representative (recruit people for new roles and train these people).

13. What are the main provider-health plan connectivity models in relation to the use of HIPAA standard transactions?

(1) In the **collaborative model**, providers and health plans agree to participate in a consortium with set HIPAA standards for data exchange. Start-up cost is usually low, and expenses are equally shared across the business partners within the consortium. An example of a collaborative commerce model is the New England Healthcare EDI Network (NEHEN). If a collaborative commerce model already exists in the entity's market and fulfills its connectivity requirements with 80% of its payers, this option should produce the quickest and most positive results. (2) In the **clearinghouse model**, providers send all transactions through a clearinghouse, which converts the data into the acceptable HIPAA compliant formats for each respective health plan. The clearinghouse approach is the predominant approach utilized by providers. While easy to implement, long-term costs can be substantial. Clearinghouses usually charge on a per transaction basis and may also have an annual membership fee and start-up fees. In addition, response time is often too slow to undertake real-time validation of eligibility. Examples of clearinghouses include WebMD and MedUnite. (3) In the **payer-specific model**, a payer offers its own unique solutions by which providers can directly connect. The access devices employ swipe cards, dummy terminals, or interactive voice recognition and have a tendency to be expensive and add additional steps to the patient registration and billing process. Other drawbacks include that providers must support multiple systems and must require registration or billing staff to re-key the information into their own source systems. (4) In the **internal integration model**, providers utilize enterprise application integration (EAI) solutions to wrap their application infrastructure within an EAI environment. The EAI architecture will support messaging to and from payers in EDI, XML, and other formats within the EDI gateway. The gateway will support the aggregation, transformation and transliteration of incoming and outgoing data packets into acceptable messaging formats for storage within a provider's logical application environment. The EAI is sometimes not as cost effective as other models depending on a provider's transaction volumes but allows for the greatest amount of integration. In an ideal internally integrated solution, the transaction would flow seamlessly from the provider's legacy system to the payer's system and back again with no human intervention or re-keying.

14. What drives the level of efficiency and impact on revenue cycle outcomes in relation to the use of HIPAA standard transactions?

The degree of integration an organization can achieve as opposed to the level of connectivity it will acquire.

15. Which code sets are to be used to populate fields of HIPAA standard transactions?
ICD-9-CM, NDC, Code on Dental Procedures and Nomenclature, HCPCS, CPT-4, ICD-10-CM

16. Why are patient medical record information standards important?

Because they will facilitate significant improvements in the quality of patient care, promote patient safety, control rising healthcare costs, enhance the productivity of clinical research, and strengthen the nation's ability to identify and respond to healthcare emergencies.

17. In what ways are data exchange standards established?

(1) Federal mandate by legislation or regulation; (2) Voluntary consensus through balloting of an industry professional group or sector, or; (3) De facto as the result of dominance in the commercial marketplace.

18. What types of transactions do the HIPAA electronic transaction standards apply to?

(1) Health claims or equivalent encounter information; (2) Healthcare payment and remittance advice; (3) Health claim inquiry and response; (4) Eligibility inquiry and response; (5) Enrollment and disenrollment in a health plan; (6) Health plan premium payments; (7) Referral certification and authorization inquiry and response; (8) Coordination of benefits; (9) Health claims attachments; (10) First report of injury

19. Which standards have been approved for adoption across the federal government?

(1) HL7 messaging (entries of orders, scheduling appointments and tests, coordination of admittance, discharge, transfer of patients); (2) NCPDP (pharmacy drug ordering); (3) IEEE 1073 series (devices that plug into information and computer systems to monitor information for intensive care units or telehealth services); (4) DICOM (images and diagnostic information to be retrieved and transferred from various manufacturers' devices); (5) LOINC (exchange of clinical laboratory results); (6) SNOMED CT (laboratory result contents, nonlaboratory interventions and procedures, anatomy, dx and problems, and nursing); (7) HL7 vocab standards for demographic info, units of measure, immunizations, clinical encounters; (8) LOINC to standardize electronic exchange of laboratory test orders and drug label section headers; (9) HIPAA transactions and code sets for electronic exchange of health-related info to perform billing or administrative functions; (10) federal terminologies related to medications (including FDA names and codes for ingredients, manufactured dosage forms, drug products, medication packages); (11) Human Gene Nomenclature (HUGN) (to info exchange on role of genes in biomedical research in the federal health sector); (12) Environmental Protection Agency's Substance Registry System for nonmedicinal chemicals of importance to healthcare.; (13) National Cancer Institute's Anatomy component of the NCI thesaurus to extend anatomy terms to subcellular structures required for research and internationally-based clinical trials.

20. What does Health Level Seven produce standards for?

For clinical data exchange (for example, transmission of patient and patient stay information, clinical orders, and clinical results), vocabulary, and document architecture.

21. What type of data is the HL7 messaging standard the accepted messaging standard for communicating?

Clinical data

22. What is the HL7 vocabulary technical committee responsible for?

For defining the HL7 standard protocol. For example, the goal of the Vocabulary TC is to “provide an organization and repository for maintaining a coded vocabulary that, when used in conjunction with HL7 and related standards, will enable the exchange of clinical data and information so that sending and receiving systems have a shared, well defined, and unambiguous knowledge of the meaning of the data transferred.

23. Which ANSI standard must be used by healthcare organizations that use HIPAA defined transactions?

ANSI ASC X12N standard formats. ASC X12N formats for field sizes, data definitions, & conditions.

24. What is the focus of the X12N subcommittee?

They develop and maintains X12 EDI and Extensible Markup Language (XML) standards, standards interpretations, and standards guidelines. Related to insurance and insurance-related business processes

25. How does the DICOM standard result in interoperability of medical imaging equipment?

By indicating (1) A set of protocols to be followed by devices claiming conformance to the standard (for network communication); (2) The syntax and semantics of commands and associated information, which can be exchanged using these protocols; (3) A set of media storage services to be followed by devices claiming conformance to the standard, as well as a file format and a medical directory structure to facilitate access to the images and related information stored on interchange media (for media communication); (4) Information that must be supplied with an implementation for which conformance to the standard is claimed.

26. What are NCPDP standards used for within the healthcare industry?

For pharmacy transactions such as pharmacy reimbursement and insurance related messaging. Used Health claims and equivalent encounter information, retail pharmacy claims; Healthcare eligibility benefit inquiry and response, retail pharmacy eligibility; COB, retail pharmacy claims; Healthcare services, referral certification and authorization, retail pharmacy claims.

27. What types of data and devices do the IEEE 1073 standards pertain to?

Communication of patient data from medical devices (patient monitors, ventilators, infusion pumps, and so on)

28. What type of data is the X12N messaging standard the accepted messaging standard for communicating?

Administrative data & HIPAA transaction set standards

29. What are the general criteria used by NCVHS to make its recommendations for terminology standards?

(1) The extent to which the standard enables interoperability between information systems; (2) The ability of the standard to facilitate the comparability of data; (3) The aspects of the standard that support data quality, accountability, and integrity; (4) The degree of market acceptance of the standard

30. What are the major terminology standards named thus far by HITSP?

ICD-9-CM; CPT; HCPCS; LOINC; SNOMED-CT; NDF-RT; RxNorm

31. What are some examples of applications where aggregate data are necessary?

Reporting basic health statistics; Reporting medical diagnoses, procedures, and services on healthcare claims in order to receive third-party payment; Performing epidemiological studies and clinical trials; Conducting medical education and research by providing a useful basis for local, regional, and national utilization comparisons; Setting health policy; Designing healthcare delivery and payment systems; Monitoring resource utilization; Developing guidelines for medical care review; Improving clinical, financial, and administrative performance; Identifying fraudulent or abusive practices; Tracking public health and risks; Processing healthcare claims to determine the correct payment for healthcare services.

32. Is a vocabulary, terminology, classification system, or nomenclature best used in applications where aggregate data are necessary?

Classification

33. What types of information is present on a data flow application diagram?

Applications; Data flow between applications (orders, results); Interface Engine; ADT (admissions, discharge, transfer); Charges.

34. What are the managerial-related aspects of an interface engine that should be considered?

Development cycle (time to create interfaces); Project control (ability to plan & predict timeframes, delivery dates, quality); Ability to maintain interfaces & interface development; Ability for proactive support/on-going maintenance: monitoring (with drilldown) & alerting; cust. satisf.; Costs (schedule, training).