THE HEALTH INFORMATION TECHNOLOGY SUMMIT

Impact of Emerging HIT Data Standards Requirements on HIPAA Implementation

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Immutable Characteristics

- Limits on Memory, Mind, & Muscle.
  - Humans (even Doctors) forget.
  - Humans can't handle more than 7 concepts at once while making a decision.
  - Humans (especially Doctors) document poorly.
- Data Handling is easy for Machines.
  - Automated Protocols, Measurement and Monitoring, Follow-up Ticklers, and Alarms.
  - Information is always legible and accessible.
  - Complete contextual recall of all related information.
  - Rapid visual (graphical) presentation of related data.

Industry Safety Record

- Medical errors/failures (in hospitals) cause
  - 44,000 to 98,000 hospital deaths per year.
  - Equivalent to 1 jumbo jet crash every day of the year!
  - Now 4th leading cause of death.
  - Average 17 years to put results of clinical research into common clinical practice.
- Aviation errors/failures (in scheduled airline flights with more than 9 seats)
  - In 17 million hours flown,
  - 2 fatal accidents resulting in 22 deaths last year.
  - Immediate crash investigations and rapid fixes.

Quality Controls in Aviation

- Standards for operations and equipment
- Check lists for work flow
- Automated instruments, backups, limits and alarms
- Full time monitoring by more than one professional on site, plus remote air traffic controllers
- Communications in common language with standardized vocabulary
- Public intolerance for accidents
- 'Black Box' recordings for investigations
- Requirement to report every accident/serious error
- Government support, investigation, and regulation
  - NTSB
  - FAA

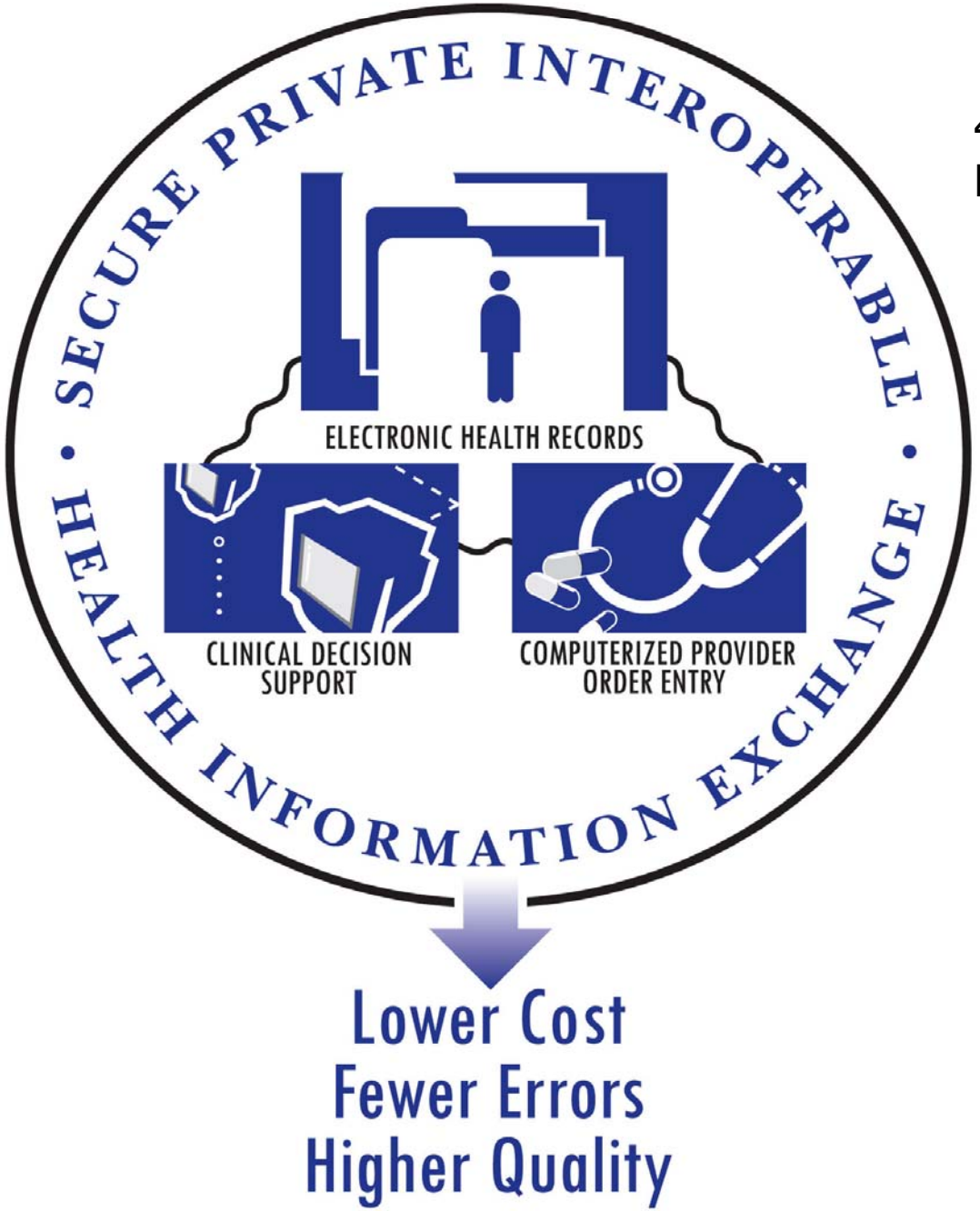
Cost, Quality, Standard Relationship

- Standards-based automation of routine functions lowers rate of rising costs (labor).
  - Only possible if accompanied by process redesign.
- Standardized data increases its usefulness for quality improvement studies.
- Clinical information standards enable cost-effective IT support at point of clinical decision making.
  - Which in turn, leads to fewer errors, higher quality care, and lower costs (e.g. e-Rx, CPOE, CDS, EHR).

PITAC Report

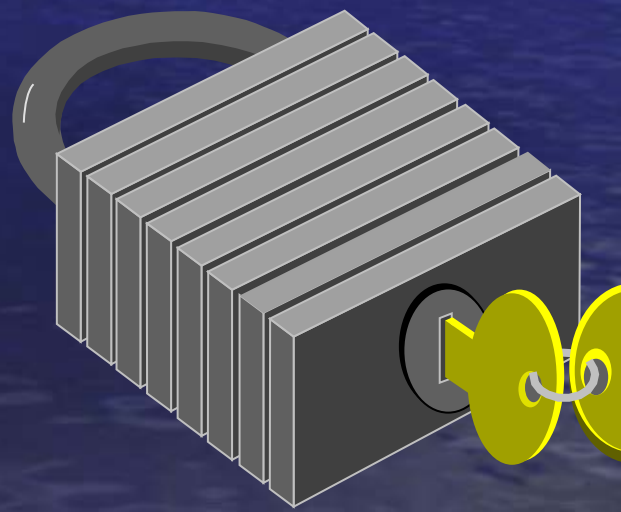
June 2004

4 Essential Elements



Required Standards

- Standard Medical Concept Vocabulary
- Standard Structure and Content
- Standard Protocols of Best Practices
- Standard Electronic Exchange Formats
- Ubiquitous, Standard Connectivity
- Security Protection Standards
- Privacy Protection Standards
- Standards for Workflow?



Purpose of HIPAA Administrative Simplification Subtitle

- "To improve the efficiency and effectiveness of the health care system
  - by encouraging the development of a health information system
  - through the establishment of standards and requirements for the electronic transmission of certain health information."

HIPAA Standards Philosophy

- To save money:
  - every payer must conduct standard transactions.
  - no difference based on where transaction is sent.
- Standards must be:
  - industry consensus based (whenever possible).
  - national, scalable, flexible, and technology neutral.
- Implementation costs less than savings.
- Continuous process of rule refinement:
  - Annual update maximum (for each standard) to save on maintenance and transitions.

Transaction Targets

- One format for each transaction
  - with minimal variation based on receiver.
- One rule for each data element
  - with well defined requirements (few options).
- One code set or vocabulary for each element
  - with rapid additions as needed.
- One method of identifying all players
  - with unique identifiers for all.
- One method of secure transmission for all
  - with an Internet ‘appliance’, for example.

HIPAA Expectations

- HIPAA claim transaction --
  - Essentially same data as UB92 and HCFA 1500.
  - Expressed in consistent, national code systems.
  - Transmitted in uniform format (X12N).
  - Specificity as to need for situational data.
    - Regardless of payer
  - Requirement that no payer could ask for more.
    - Data elements limited to those Required, plus Situational data elements where situation was true.
  - Date certain conversion to avoid confusion.
  - Transition could be handled by translator software or clearinghouse.
    - Expected industry agreement on testing and transition timetable
    - Reasonable industry interpretation of implementation guidelines

Unexpected Problems

- Regulation publication delays.
  - Addenda not published until February.
- IGs with unexpected data element requirements.
  - Not fixed in Addenda (minor fixes ignored to get done in time).
  - No time to wait for next round of improved standards.
- Wherever regulation is open to interpretation, industry experience with OIG leads to fear and very conservative legal approaches.
- Unreasonable implementation decisions --
  - All 'required' and situational data elements required for 'compliance'.
  - Errors and missing data not compliant – 100% perfection expected.
  - Reject whole batch when 1 transaction is 'non-compliant'.
- Delays in vendor delivery of updates.
  - No information from vendor as to when they will deliver.
  - Re-enrollment requirement.
  - New EDI contract requirements.
  - Enforcement regs unpublished.
- Insistence on perfection to be compliant.
- New contract requirements delay testing.
- Unexpectedly high cost of compliant software updates.

Savings Start AFTER Claims

- Getting the claims submitted successfully is just the start!
  - Implementing all the other adopted standards is necessary for savings over next 5-10 years:
    - Eligibility for a Health Plan.
    - Referral Certification and Authorization.
    - Health Care Claim Status.
    - Enrollment and Disenrollment in a Health Plan.
    - Health Care Payment and Remittance Advice.
    - Health Plan Premium Payments.
    - Coordination of Benefits.
- Future HIPAA standards will add to both costs and savings.
  - Security
  - Health Claim Attachments
  - Identifiers
  - PMRI? EHR?
- Need to move to one standard for each transaction with:
  - Decreased variability that works for all.
  - Provider participation to clean them up.
  - Testing and incremental improvement over time.

Intersection with HIPAA

- HIPAA Claim Attachment Standard
  - HL7 clinical message inside X12N admin message.
  - Clinical standards need finer granularity than administrative standards (SNOMED vs ICD-9-CM).
- XML
  - All HL7 clinical messages moving to XML (version 3) over time.
  - HL7 message in claim attachment standard is XML.
  - X12N considering move to XML.
  - Common tool sets available for efficient implementation.
  - Expect convergence over time.

Missing Infrastructure

- Communications infrastructure.
  - Same need for ubiquitous, secure communications.
  - Clinical exchange includes provider to provider transactions not considered under HIPAA.
  - Not set by HIPAA, not implemented by gov't, not adopted by industry.
  - Nobody is taking responsibility for this critical infrastructure.
- Poor implementation of standards.
  - HIPAA standards poorly followed by industry even with force of law behind them.
  - Clinical standards are proposed as voluntary (likelihood of widespread compliance is in doubt without overwhelming financial incentive).

New Standards Requirements

- Standards must be tight enough so that negotiation between trading partners about content is not required (or even possible).
- Standards must be include full, round trip set.
  - HIPAA claim transaction does not specify responses reporting errors/failures.
- Standards must include tools (including APIs) to make standard implementation easy.
- Security (including encryption, authentication, non-repudiation) must be included in standard infrastructure available to all health care.

Future view of process:

- Clinician records clinical information at fine granular level during clinical encounter.
- Real-time data exchange and adjudication of claim before patient leaves the office (like Rx today).
- Plan pays extra for information supplied at clinical level for quality improvement, fraud prevention, etc.
- Requires automated mapping between clinical and administrative coding systems (e.g. SNOMED to ICD-9-CM) for payment purposes.
- Takes job of coding out of hands of clinicians.
- Requires implementation of EHR system to produce data for this scenario.

Required Standards Remaining

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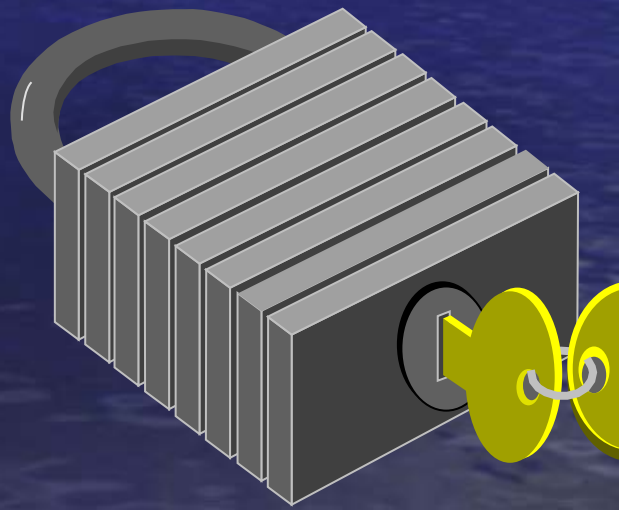

Questions?

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