Achieving Data Integrity Toward Health Information Exchange

Dan Rode, MBA, CHPS, FHFMA
Vice President, Advocacy and Policy
American Health Information Management Association
Achieving Data Integrity:

National Health Information Professionals Week
Achieving Data Integrity: Definitions

- EHI – electronic health information
- EHR – electronic health records
- HIE – health information exchange
- HIEO – health information exchange organization: also called regional health information exchange (RHIO)
- HIM – health information management [profession]
- HIPAA – Health Insurance Portability and Accountability Act of 1996
- HIT – health information technology
- HITECH – The Health Information Technology for Economic and Clinical Health (2009)
Achieving Data Integrity: AHIMA

- 84-year old non-profit association of health information management (HIM) professionals

- Offering Eight professional credentials

- 64,000 + members/ 40 employer types/ close to 120 different functions related to HIM and informatics

- HIM: collection, abstraction, coding, reporting, transfer, storage, analysis, and protection of health information

- Standards for: data collection, use and exchange, classifications and terminologies, privacy and security, and education of the profession
Achieving Data Integrity: AHIMA

• Active in issues related to:
  • Clinical data and documentation
  • Implementation of ICD-10-CM/PCS classifications
  • Adoption, implementation, and effective use/management of electronic health records, and health information exchange.
  • Confidentiality, privacy, and security of health information wherever it exists
  • HIM workforce education
  • Health Information Management Profession Recognition
Achieving Data Integrity: AHIMA

- Principles:
  - The Individual
  - Data Integrity
  - Data Continuity

- Quality health through quality data
Achieving Data Integrity: Transition Underway

- Notes
  - Records (limited standards)
    - Hybrid: Paper & Electronic
      - Electronic
        - Electronic (standards)

Privacy and Security
Achieving Data Integrity: Information Flow

- Treatment or diagnostic service – complaint/order and treatment/testing or diagnosis
- “Recording” of information
- “Collection and storage of information”
- “Primary data,” data use for care
- Data exchange for “outside” care
- Public Health, Quality Measurement, Research
Achieving Data Integrity: Information Flow
Achieving Data Integrity: Documentation

- Age old issues:
  - What to collect?
  - How to collect it?
  - How to use it?
  - Who wants it?
  - Who can I give it to?
  - How long do I keep it?
Achieving Data Integrity: Documentation

• What to collect?
  • The information I need to treat/diagnose.
  • The information my colleagues need.
  • The information a referral may need.
  • The information I may have to give for external purposes:
    • reimbursement
    • quality / quality measurement
    • public health
    • population health
    • research

• Patient / Consumer

Information I need for quality care!
Achieving Data Integrity: Documentation

• How to collect it?
  • Hand written notes
  • Dictation
  • Recording
  • Formats (electronic)
  • Scribes

• Innovation???
Achieving Data Integrity: Collection

• Notes
• Records
  • American College of Surgeons
  • Record systems
  • Manual movement of paper
  • Filing
  • Identification
  • Order – if you collect; it how do you find it?
• And where do you keep these records?
Achieving Data Integrity: Collection

• Electronic order entry
• Electronic health records systems
  • Hybrid systems
  • “Collect once use many times”
• Enterprise or local
• Integration
  • Where did the data come from?
Achieving Data Integrity: Traditional Use

- Primary Care (P/H/E)
- Referrals (P/E)
- Claims: (P/C/E)
  - Diagnostics and procedures (P/E)
  - Parts of the record for “more” information (P)
  - The entire record (P)
  - Special Reports (P/E)
  - Quality measurement reporting
- Public health (P/E)
Achieving Data Integrity: EHR Use

- Primary Care
- Referrals (Standard reports or e-mail)
- Claims:
  - Diagnostics and procedures (expanded)
  - Attachments (parts of the record) - 2016
  - Electronic Record
  - Special Reports (format or standard)
  - Quality measurement reporting
- Public health (P/E)?
- Patient Reports (standards)
- Analytics
- Decision Support
- Registries and Research
Achieving Data Integrity: Secondary Use

- Claims (HIPAA Standards)
  - Administrative Data
  - Diagnoses and Procedure Codes
    - ICD-10, ICD-9-CM, CPT®
- Referrals (Standard reports or e-mail)
- Quality measurement reporting
- Public health reporting (P/E)?
- Health agency reports (analytics)
- Research
- “Meaningful Use”
Achieving Data Integrity: Healthcare Standards

• Transaction Standards:
  • Administrative
    • US began using paper standards in 1970’s
    • Electronic standard development began 1989
    • How are standards used – industry councils
    • HIPAA 1996 Legislation
    • HIPAA first proposed rule 1999 – 2002/3
    • 8 HIPAA standards
    • ACA 2010 required uniform use of standards now underway!
Achieving Data Integrity: Healthcare Standards

• Transaction Standards:
  • Clinical
    • Internal communications – Health Level Seven
      • Various standards as needed 1987
    • 2003 President Bush State of the Union
      • HHS Secretary Thomas – standard EHR
  • Global Standards
    • HL7
    • ISO (215)
    • Pharmacy
    • Dental
    • +
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • Common language across sites of services and geography

• Classifications
  • World Health Organization (WHO) Family of International Classifications (FIC)
  • International Classification of Diseases
    • Turn of the 20th century
    • ICD-9-CM
      • Developed mid-70’s use began 1979
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • Classifications
    • ICD-9-CM
      • Developed mid-70’s use began 1979
      • CM (clinical modification-US)
      • Vol. 1&2 diagnoses Vol 3 IP procedures
    • ICD-10
      • Used by most industrial and many 3rd world countries
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • Classifications
    • ICD-10 used in US for mortality coding - 1999
    • ICD-10-CM and ICD-10-PCS
      • PCS: procedure classification system – developed in mid-1990s
      • CM: diagnoses clinical modification – developed in mid-1990s ready 1998
    • Both classifications updated yearly by HHS
    • Delayed implementation for many reasons
    • Final Rule 1/16/2009-effective 3/17/2009
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • Classifications
    • There are other classifications
    • International Classification of Functioning, Disability and Health (ICF)
    • Classifications allow the transmission of key understood by all users without having to transmit major sections of the record.
  • Require uniform guidance
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • Terminologies
    • Machine language at a very granular level
    • Converts documentation into machine language but in a uniform manner
    • Systematized Nomenclature of Medicine-Clinical Terms
      International Classification of Functioning, Disability and Health (ICF) or SNOMED-CT
    • American College of Pathology transferred to
    • International Health Terminology Standards Development Organization (IHTSDO)
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • Terminologies
    • SNOMED-CT®
    • Laboratory reporting standards LOINC
    • Over 100 terminologies in US
    • National Library of Medicine (NLM “maps” or harmonizes several terminologies as well as terminologies and classifications)
Achieving Data Integrity: Healthcare Standards

• Vocabulary Standards:
  • META DATA
    • Data behind the data
      • Who was the source of the data?
      • How old is the data?
      • What type of data is it?
      • Are there restrictions on the data?
      • Was the data modified?
      • Who touched the data?
    • Essentially no vocabulary exists.
Achieving Data Integrity: Healthcare Standards

- Vocabulary must be based on standards in order to allow for interoperability.
  - Terminologies
  - Classifications
  - Meta Data
- “Translations” usually mean variation
- Data exchanged, internally or externally – allows for many uses, but without standards cannot be trusted.
- Assuming the US moves ahead with the adoption and use of terminologies, classifications, and meta data we will have an electronic interoperable system.
Achieving Data Integrity: Healthcare Standards

- There is still room for error even with standards
- Systems software will still needed to be tested and audited
- Vocabularies need to expand and be uniformly modified
- Vocabularies need governance and acceptance
- Moving to global classifications allows for more benefit to all nations and to the health of the world’s population
Achieving Data Integrity: Healthcare Standards

- While it is important to have standard transaction standards, for data integrity we must standardize both the transaction standards and the vocabulary standards to provide:
  - patient safety
  - record legality or evidentiary support
  - accurate public health reporting
  - larger research analysis
  - better application of (UNIFORM) privacy rules and security applications
  - transfer of data to other systems
Achieving Data Integrity: Security

- Security became important with HIPAA
- HIPAA security rules permitted flexibility
- Security rules are more than just locking the data up or encrypting data/records.
- Security is providing protection and back-up for data and information
- Security is more than just systems – it also means addressing the people component of any system.
- Security is authentication.
- Security is testing
- Security included matching data
Achieving Data Integrity: Privacy

• Without trust the health record will never be complete and the integrity of the data could be questioned.
• Trust will not be given unless there is no fear that the data could be use against the individual.
• We must address any inappropriate discrimination through the access to medical information no matter where the information or data exists.
• We must address any intentional or unintentional misuse of health information.
• When do we start?
Achieving Data Integrity: Future

• We are adopting standards – but very slowly.
• We have to approach a better means of choosing and using national standard.
• There must be a public private consensus that includes the user/users.
• We have the ARRA-HITECH “Meaningful Use” criterion as a start.
• We must understand the role of:
  • data integrity
  • standards for transactions and vocabulary
  • uniformity
Achieving Data Integrity: Future

- Data Integrity
- Data Continuity
- Benefit the Patient
- The Consumer
- Your Constituent
Achieving Data Integrity: Questions?
Comments?

Dan Rode, MBA, CHPS, FHFMA
Vice President, Advocacy and Policy
AHIMA
1730 M Street, NW, Suite 502
Washington, DC 20036
Telephone: (202) 659-9440
E-Mail: dan.rode@ahima.org