What Is Healthcare Data?

- Raw facts generated in the process of patient care
- Can be clinical, financial, or demographic
- Multiple forms, formats, and sources
- Generally stored as characters, words, symbols, measurements, or statistics
- Processed to provide healthcare information
Data Quality can be defined as the assurance of the accuracy and timeliness of healthcare information.
Uses of Healthcare Data

• Healthcare clinical decision-making, research, and treatment development
• Public health and pandemic pattern detection
• Management and policy decision-making such as actuarial premium setting, cost analysis, and service reimbursement
• Business planning, accreditation, quality assurance, billing and reimbursement (revenue cycle), and compliance and risk management
Quality Clinical Records
= Quality Care
Characteristics of Data Quality

- \textit{Accuracy}: free of errors
- \textit{Accessibility}: easily obtainable
- \textit{Consistency}: recorded consistently to prevent misinterpretation or ambiguity
Data Characteristics (continued)

- *Currency and Timeliness*: data should be up to date and recorded at or near the time of the event or observation
- *Comprehensiveness*: all the required data elements are captured
- *Definition*: Users of the data must understand what the data mean and represent
Data Characteristics (continued)

- **Relevancy**: relevant to the purpose for which it is collected
- **Granularity**: Collected at the appropriate level of specificity
- **Precision**: measurements are close to the actual size, weight, etc.
Threats to Data Quality

- Design flaws
- Methods for data collection
- Technical errors
- Interpretation differences
- Interfaces, transferring data from one system to another
Barriers to Data Quality

- Poor documentation practices
- Outdated coding classification system in the US
- Lack of data sets and data standards
- Inconsistencies in reporting requirements
Common Mechanisms to Ensure Data Quality

• Audit and monitoring activities
• Database, data warehouse design
• Organizational data dictionary
• System design including testing and initial evaluation
• Maintenance and ongoing evaluation
Data Quality Is No Accident

Ask not what your data can do for you, but what you can do for your data.
Data Quality Management

• Identify and resolve data quality issues
• Routinely monitor and assess quality
• Provide preventive maintenance
• Support data users
• Facilitate good data management
Examples of DQM Efforts

- Clinical documentation improvement programs
- Assessment of clinical coding accuracy
- Master Patient Index integrity
Data Quality has an impact both internally and externally.
Quality Data

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Accurate, Timely Information

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Knowledge for a Healthy Nation
This is Health Information and Technology Week

November 6-12, 2005
HIM Vision

HIM is the body of knowledge and practice that ensures the availability of health information to facilitate real-time healthcare delivery and critical health-related decision making for multiple purposes across diverse organizations, settings, and disciplines.
Information Management Is Critical to achieve Data quality

The need for more and better data requires a concentrated movement toward processes that place value on how data is defined, understood, analyzed, and interpreted.
Questions?

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