

"In attempting to arrive at the truth, I have applied everywhere for information, but in scarcely an instance have I been able to obtain hospital records fit for any purpose of comparison...if wisely used, these improved statistics would tell us more of the relative value of particular operations and modes of treatment than we have any means of obtaining at present."

Nightingale F. Notes on Hospitals. London: Longman, Green, Longman, Roberts, and Green, 1863, page 176. Available from http://pds.lib.harvard.edu/pds/view/7024419?n=208.



## Interoperable Systems

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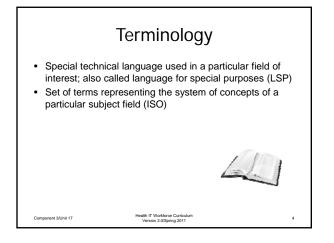
- Exchange data seamlessly between systems
- Must have data coded in a standard format that matches data structures in other systems to accomplish data exchange

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• Use standardized terminologies

Component 3/Unit 17

Component 3/Unit 17



# Standardized Terminologies

- · Allow the tracking of adverse events
- Provide documentation of services for reimbursement
- Advance the science of care delivery

Component 3/Unit 17

- Allow the comparison of data captured in different systems for outcome management
- Facilitate the linkage of diagnosis-interventionsoutcomes

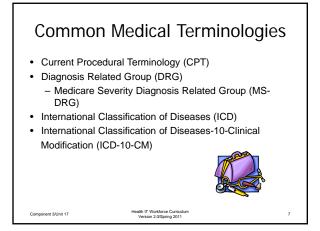
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## Classifications

- Taxonomic structures most commonly used in healthcare are classification systems
- Non-combinatorial hierarchical languages designed to categorize objects
- Objects classified are generally patient diagnosis and care interventions and implemented as interface terminologies at the point of care (i.e. ICD-9)

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# **Common Nursing Terminologies**

- North American Nursing Diagnosis Association (NANDA)
- Clinical Care Classification (CCC)
- Nursing Intervention Classification (NIC)
- Perioperative Nursing Data Set (PNDS)
- International Classification for Nursing Practice (ICNP®)

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## National Committee on Vital and Health Statistics

- Health Level-7 for
  - Messaging

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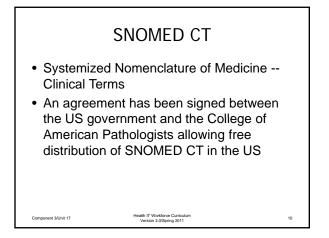
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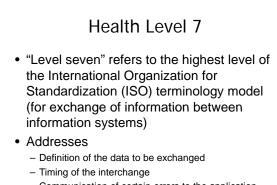
- Clinical encounters
- SNOMED CT for
  - Diagnosis and problem list
  - Non-laboratory procedures and interventions

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Anatomy and nursing data

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- Communication of certain errors to the application

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#### Logical Observation Identifier Name Codes

- Originally developed to provide a standard set of codes and names for the electronic reporting of laboratory results
- LOINC has expanded to include items related to the measurement of clinical observations, such as blood pressure and symptoms

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# Summary Data exchange between interoperable systems requires that data be formatted in a standard manner Standardized healthcare terminologies Allow for the design of interoperable information systems Describe patient diagnoses, interventions, and outcomes

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