

# Glossary

**Accuracy of Information**

This principle states that personal information should be as accurate, complete, and up-to-date as is necessary for the purposes for which it is to be used.

**Artificial Intelligence**

A broad term describing the field of developing computer programs to simulate human thought processes and behaviors.

**Business Process Redesign**

An examination of key business processes in order to identify radical changes to achieve improved results.

**Cancer Information Service**

The National Cancer Institute's link to the public, interpreting and explaining research findings in a clear and understandable manner, and providing personalized responses to specific questions about cancer.

**Case Study**

For the purposes of this text, a detailed analysis of a person or group from a social, psychological, or medical point of view.

**Clinical Guidelines**

Systematically developed statements to assist medical and patient decisions about appropriate healthcare.

**Clinical Information System**

An information system that can track individual patients as well as populations of patients. The care team can use the system to guide the course of treatment, anticipate problems, and track progress.

**Clinical Protocol**

A medical protocol intended to ensure and evaluate the efficacy of a new medical device and/or procedure.

**Community of Practice**

Networks of people who work on similar processes or in similar disciplines and who come together to develop and share their knowledge in that field for the benefit of both themselves and their organizations.

**Computer-Based Training**

Training carried out by interaction with a computer. The programs and data used are often referred to as “courseware”.

**Currency of Information**

A term used to assist practitioners and healthcare professionals to determine how up to date an information source is.

**Data Analysis**

Typically used to sort through data in order to identify patterns and establish relationships.

**Data Integrity**

A state when data is unchanged from its source and has not been accidentally or maliciously modified, altered, or destroyed.

**Data Model**

The product of the database design process which aims to identify and organize the required data logically and physically.

**Data Semantics**

A connection from a database to the real world outside the database.

**Data Sharing**

Sharing and disseminating data with colleagues and collaborators, international entities, or making data available to the wider public.

**Data Warehousing**

A generic term for a system for storing, retrieving, and managing large amounts of any type of data. Data warehouse software often includes sophisticated compression and hashing techniques for fast searches, as well as advanced filtering.

**Database**

An organized body of related information.

**Database Applications**

One or more large structured sets of persistent data, usually associated with software to update and query the data.

**Decision Support Systems**

Information technology and software specifically designed to help people at all levels of the company make decisions.

**Dicom**

Digital Imaging and COmmunications in Medicine—a standard developed by the American College of Radiology—National Electrical Manufacturer’s Association for communications between medical imaging devices. It conforms to the ISO reference model for network communications and incorporates object-oriented design concepts.

**Distributed Healthcare Environment**

A middleware which constitutes the basic functional infrastructure of the healthcare center, independent from the technological requirements of the organization.

**Electronic Health Record**

A secure, real-time, point-of-care, patient-centric information resource for clinicians. The EHR aids clinicians’ decision-making by providing access to patient health record information where and when they need it and by incorporating evidence-based decision support.

**Evidence-Based Medicine**

Evidence-based medicine (EBM) involves integrating individual clinical experience with the best available external clinical evidence from systematic research when making decisions about patient care.

**Expert System**

A computer program developed to simulate human decisions in a specific field or fields. A branch of artificial intelligence.

**Explicit Knowledge**

Knowledge that can be shared by way of discussion or by writing it down and putting it into documents, manuals, or databases.

**Health Informatics**

The understanding, skills, and tools that enable the sharing and use of information to deliver healthcare and promote health.

**Health Information Management**

The planning, budgeting, control and exploitation of the information resources in a healthcare organization.

**Health Information Network**

Provides an integrative information resource, as well as training, service, and access to consumers and staff of important healthcare entities, such as treatment centers, service providers, consumer advocacy groups, and other affiliated organizations.

**Healthcare**

The prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions.

**Healthcare Information System**

System consisting of the network of all communication channels used within a healthcare organization.

**Health Care Infrastructure**

Systematic provision of a society for the optimal well-being of its members.

**Healthcare IS Research**

Scientific investigation into systems and communication channels used within a healthcare organization.

**Healthcare Standardization**

Solving problems that are common across the healthcare communities.

**Healthcare System**

Organization by which an individual's health care is provided.

**Hospital Information System**

The aim of a HIS is to use a network of computers to collect, process and retrieve patient care and administrative information from various departments for all hospital activities to satisfy the functional requirement of the users.

**Human Computer Interaction**

The study of how humans interact with computers and how to design computer systems that are easy, quick, and productive for humans to use.

**Information Processing**

Sciences concerned with gathering, manipulating, storing, retrieving, and classifying recorded information.

**Information Quality**

Discerning which information sources are more useful and accurate than others.

**Information Resource**

Any entity, electronic or otherwise, capable of conveying or supporting intelligence or knowledge.

**Information Retrieval**

Actions, methods, and procedures for recovering stored data to provide information on a given subject.

**Information Systems**

The general term for computer systems in an organization that provide information about its business operations.

**Interface**

A connection (through a hardware device or through a software program) between different components of a computer system.

**IT Capability**

The capacity of IT to be used, treated, or developed for a specific purpose.

**IT Management**

The manner or practice of managing IT, specifically regarding handling, supervision, or control.

**IT Strategy**

An elaborate and systematic IT plan of action.

**Knowledge Delivery**

The act of conveying knowledge.

**Knowledge Management**

The creation and subsequent management of an environment which encourages knowledge to be created, shared, learned, enhanced, organized, and utilized for the benefit of the organization and its customers.

**Knowledge Sharing**

Mechanisms to communicate and disseminate knowledge throughout an organization.

**Knowledge Worker**

An employee whose role relies on his or her ability to find and use knowledge.

**Knowledge-Based Systems**

Computer programs designed to simulate the problem-solving behavior of human experts within very narrow domains or scientific disciplines—this discipline is a sub-set of Artificial Intelligence.

**Learning Organization**

An organization that views its success in the future as being based on continuous learning and adaptive behavior.

**MIS**

Information systems designed for structured flow of information and integration by business functions and generating reports from a database.

**Neural Network**

Computer architecture in which processors are connected in a manner suggestive of connections between neurons; can learn by trial and error.

**Object-Oriented Approach**

A design method in which a system is modelled as a collection of cooperating objects and individual objects are treated as instances of a class within a class hierarchy.

**Organizational Learning**

The ability of an organization to gain knowledge from experience through experimentation, observation, analysis, and a willingness to examine both successes and failures, and to then use that knowledge to do things differently.

**Social Capital**

Represents the degree of social cohesion which exists in communities. It refers to the processes between people which establish networks, norms, and social trust, and facilitate coordination and cooperation for mutual benefit.

**Tacit Knowledge**

The knowledge or know-how that people carry in their heads. Compared with explicit knowledge, tacit knowledge is more difficult to articulate or write down and so it tends to be shared between people through discussion, stories and personal interactions.

**Virtual Community**

Online meeting place for people. Designed to facilitate interaction and collaboration among people who share common interests and needs.