Talking the Talk - Technology Terms for School Nurses

These terms are common to all health office software products. Some are also general technology terms which the school nurse may come across in daily practice. A basic understanding of technology vocabulary is essential to successful review of school health office software products.

Ad Hoc Reporting: Allows end users to build their own reports and modify existing ones with little to no training. Ad hoc reporting generates reports that meet individual information requirements.

Alerts: Pop-ups or reminders of clinical concerns or reminders.

American Recovery and Reinvestment Act: (ARRA) Authorizes the Centers for Medicare & Medicaid Services (CMS) to provide a reimbursement incentive for physician/hospital providers who are successful in becoming "Meaningful Users" of an electronic health record (EHR) system. Incentive payments began in 2011. Starting in 2015, providers are expected to have adopted and be actively utilizing an EHR in compliance with the "Meaningful Use" definition or they will be subject to financial penalties under Medicare.

Application: Software that performs a useful function or the useful function itself.

Application Service Provider (ASP): Hosts and manages software from a centrally managed facility. Applications are delivered over networks (WAN, Internet) on a subscription fee/rental basis. This model is also been referred to as **"software-as-a-service" or "SaaS".**

Audit Trail: Security system report that tracks a user's access, deletion or modification of data and the time at which each event happened. This includes user login, file access, other various activities, and whether any actual or attempted security violations occurred.

Authentication: Verification of the identity of a person accessing medical records. This typically involves entering a password or other personal information so that the identity of the person using the computer is verified and access can be enabled.

Authorization: Process of giving permission to do or have something. In multi-user computer systems, a system administrator defines for the system which users are allowed access to the system

Backup: Process of copying computer information into a second storage area for safety.

Bandwidth: Data transmission rate; the maximum amount of information (bytes/second) that can be transmitted along a connection over the internet. A higher number is a faster connection. Images require far more bandwidth to transmit than simple reports.

Batch or group processing: Process by which data is collected and processed in groups.

Browser: Short for Web browser, a software application used to locate and display Web pages.

Centers for Medicare and Medicaid Services (CMS): Federal agency within the U.S. Department of Health and Human Services which is responsible for administering Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), HIPAA and CLIA. CMS is responsible for oversight of HIPAA security standards.

Change log: Record of changes that have occurred within a software application. The log can serve as an audit record for activity in a file system.

Client/Server Architecture: Type of computer information system in which a client program sends a request to a computer server. This system architecture usually implies that the server is located on site as opposed to the ASP (Application Server Provider) architecture, which accesses computer processes and data over the internet.

Client Software: Software that acts as the interface between the client computer and the server.

Cloud Computing/Hosting: Refers to applications and services offered over the Internet. These services are offered from data centers all over the world which collectively are referred to as the "cloud." The cloud metaphor represents the Internet.

CPU: Stands for "Central Processing Unit." This is the pretty much the brain of your computer.

Cross Platform: Software that can run on multiple types of computer systems.

Database: Collection of one or more data sets.

Data aggregation: Process by which information is collected, manipulated and expressed as summary. Data aggregation is primarily performed for reporting purposes, policy development, health service management, research, statistical analysis and population health studies.

Data Integrity: Refers to the validity of data where data has not been altered or destroyed in an unauthorized manner.

Data Set: Group of data elements relevant for a particular use.

Data Structure: A way to store and organize data in order to facilitate access and modifications.

Electronic Health Record (EHR): Computerized collection of information regarding the health of an individual. It is also a generic term for all electronic patient care records. EHR's imply a level of interoperability beyond the capability of an EMR (Electronic Medical Record) but are similar in terms of the information stored and the purpose for the system. Although technically incorrect, the terms EHR and EMR are often used casually in interchangeable fashion.

Electronic Medical Record (EMR): Provider-based medical record that includes all health documentation for one person covering all services provided within one enterprise. Although technically incorrect, the terms EHR and EMR are often used in interchangeable fashion.

End-user: Use of programs by the user; not the computer professional.

Ethernet: Kind of local area network.

Field: Area where data is located in a database record.

File: A file is a collection of data stored in one unit, identified by a filename. It can be a document, picture, audio or video stream, data library, application, or other collection of data.

Firewall: Computer or software system system designed to prevent unauthorized access to or from a computer or computer network.

Hardware: Physical components of an information system.

Health Information Exchange (HIE) – Electronic movement of health-related information among organizations according to nationally-recognized standards. The purpose of HIE development is to improve healthcare delivery by making information for a particular patient readily accessible by all healthcare providers.

Health Information Organization (HIO) – Organization that oversees and governs the exchange of health related information among organizations according to nationally-recognized standards.

HHS: Federal Department of Health and Human Services.

HIPAA: Health Insurance Portability and Accountability Act of 1996: Federal law that seeks to establish standardized mechanisms for electronic data **interchanges** (EDI), security, and confidentiality of all healthcare-related data.

Health Information Technology (HIT): Health Information Technology describes the management of health information and its secure exchange between consumers, providers, government and quality entities, and insurers.

Health Information Technology for Economic and Clinical Health Act (HITECH Act): Created to stimulate the adoption of electronic health records (EHR) and supporting technology in the United States. President Obama signed HITECH into law in 2009, as part of the American Recovery and Reinvestment Act of 2009 (ARRA), an economic stimulus bill.

Health Level Seven (HL7): An international set of open standards for data format and content that allows different health information systems to communicate with one another to improve healthcare delivery and improve workflow. HL7 is a not-for-profit, volunteer based organization.

Information Technology (IT): Includes computer hardware and software, operating systems, Web-based information and applications, telephones and other telecommunications products, video equipment and multimedia products, information kiosks, and office products, such as photocopiers and fax machines.

Interface: Mechanism/method by which interaction takes place between the user and the machine.

Internet: Worldwide collection of computer networks, cooperating with each other to exchange data using a common software standard. It includes the World Wide Web, E-mail, FTP and instant messaging.

Interoperability: Capability to provide successful communication between end-users across different computer domains and networks, facilities, and enterprises, with the goal of allowing interoperability, or easy exchange of information between different electronic medical records systems.

IT: Information technology.

Meaningful Use (MU): Set of clinical quality measures to promote improved health care quality, efficiency and patient safety. The criteria for meaningful use will be staged in three steps over the course of the next five years. Stage 1 will set the baseline for electronic data capture and information sharing. Stage 2 (est. 2013) and Stage 3 (est. 2015) will continue to expand on this baseline and be developed through future rule making.

MIS: Management information system.

Network: Linked computers.

Nursing Informatics: Study of information technology as it applies to the discipline of nursing and includes information technology, computer science, information science, nursing science and management information systems.

ONC: Office of the National Coordinator for Health Information Technology

Operating System: Master program for running the computer.

PHI: Personal Health Information

Personal Health Record (PHR): PHR includes all healthcare information from all sources, compiled and maintained by the patient.

Platform: Basic technology of a computer system's hardware and software that defines how a computer is operated and determines what other kinds of software can be used.

Pull down menu: The menu of commands or options that appears when you select an item with a mouse. Also called a drop-down menu.

Record: Set of data elements within a computer program.

Regional Extension Centers (RECs): Established by the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009. Each REC serves a defined geographic area. NY has 2 RECs: NYeC, and REACH, which provide assistance to help primary care providers to select, successfully implement and meaningfully use certified EHR technology.

Regional Health Information Organization (RHIO): The terms "RHIO" and "Health Information Exchange" or "HIE" are often used interchangeably. RHIO is a group of organizations with a business stake in improving the quality, safety and efficiency of health care delivery.

Scalable: Refers to how well a hardware or software system can adapt to increased demands.

Schools Interoperability Framework/Systems Interoperability Framework Standard Interface Format (SIF): Data sharing specification for academic institutions from kindergarten through twelfth grade (K-12). SIF is not a product but an industry initiative that enables diverse applications to interact and share data.

Security: Physical, technological and administrative safeguards used to protect individually identifiable health information.

Server: A server is a computer that provides data to other computers. It may serve data to systems on a local area network (LAN) or a wide area network (WAN) over the Internet.

Software: Programs which provide instructions to operate computer and related devices.

Stand-alone Systems: Self-contained computer system on an individual computer.

Structured Data: Data managed by technology that allows for querying and reporting predetermined data types and relationships.

Student Information/Management Systems (SIS/SMS): Software application used in education to manage student data.

Super-Users: Someone who knows a lot about a computer program and can educate other people to use it.

System Requirements: Traits or characteristics necessary for the system to function.

Tables: A table is a data structure that organizes information into rows and columns.

Template: Templates are pre-defined choices of pick-lists on a computer screen designed to streamline the documentation process by limiting the number of choices and effort required to input data. Also called a library or dictionary.

Unstructured Data: Data which is not structured such as free-text. The computer cannot automatically extract properties and relationships from unstructured data.

Web-enabled: Content that can be accessed with a web browser or via http or https.

Workflow: Process by which documents, information or tasks are passed from one participant or system to another for action, according to a set of standardized rules

World Wide Web (WWW): This is not a synonym for the Internet. The World Wide Web, or just "the Web," is a subset of the Internet. The Web consists of pages that can be accessed using a Web browser. The Internet is the actual network of networks where all the information resides.

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