



Appendix E: Glossary

Computerized Provider Order Entry (CPOE). An application that allows health care providers to use information technology to directly enter medical orders electronically in inpatient and ambulatory settings, replacing the more traditional order methods (paper, verbal, telephone, and/or fax). CPOE systems can allow providers to electronically enter medication orders as well as laboratory, admission, radiology, referral, and procedure orders. Strictly defined, it is the process by which providers directly enter medical orders into an application.¹

Data Mining. Analysis of information in a database using tools that search for trends or anomalies, without knowledge of the data's meaning. Mining a clinical database may produce new insights regarding outcomes, alternate treatments, or effects of treatment on different races and genders.²

Electronic Prescribing (e-prescribing). The use of computing devices to enter, modify, review, and communicate drug prescriptions. E-prescribing allows providers to electronically transmit a new prescription or renewal authorization to a community or mail-order pharmacy. E-prescribing delivers eligibility, formulary, and medication history data and provides additional clinical decision support.³

Electronic Health Record (EHR). An electronic record of health-related information about an individual that conforms to nationally recognized interoperability standards, and that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.⁴

Electronic Medical Record (EMR). An electronic record of health-related information about an individual that can be created, gathered, managed, and consulted by authorized clinicians and staff within a single health care organization.⁴

Health Information Exchange (HIE). The electronic movement of health-related information among organizations according to nationally recognized standards.⁴

Health Information Organization. An organization that oversees and governs the exchange of health-related information among organizations according to nationally recognized standards.⁴

Health Insurance Portability and Accountability Act of 1996 (HIPAA). A law that protects the privacy of individually identifiable health information and sets national standards for the security of electronic protected health information.⁵

Master Patient Index (MPI). An index of patients maintained by individual providers and organizations that treat patients. The MPI contains the patient identifiers and the patient's personal and demographic information. The MPI maintained by an organization is unique to that organization, and serves as a directory of patients for ready reference, verification, and identification of the patient and patient information.⁶



Nationwide Health Information Network (NwHIN). The portfolio of nationally recognized services, standards and policies that enable secure health information exchange over the Internet. NwHIN is also used as an umbrella term to describe the result of standards harmonization and pilot testing activities led by the Office of the National Coordinator for Health Information Technology, U.S. Department of Health and Human Services.⁷

Personal Health Record (PHR). An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards, and that can be drawn from multiple sources while being managed, shared, and controlled by the individual.⁴

Regional Health Information Organization (RHIO). An organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and health care in that community.⁴

Standards. Standards enable interoperability by encoding health information using a common, generally agreed-upon “language” that multiple systems can read. There are two main concepts to consider about standards: syntax and semantics. Syntax refers to the grammar rules for a defined “language” so the electronic messages being exchanged can be properly deconstructed when received. Semantics ensures that message components are coded so that their meaning can be interpreted or understood (e.g., which lab tests were performed and what their values are) when the message is deconstructed.⁸

References

1. Finkler SA, Knickman JR, Hendrickson G, et al. A comparison of work-sampling and time-and-motion techniques for studies in health services research. *Health Serv Res* 1993;28(5):577-97.
2. Doyle JK. Introduction to Survey Methodology and Design. In: Woods DW, ed. *Handbook for IQP Advisors and Students*. Worcester, MA: Interdisciplinary & Global Studies Division – Worcester Polytechnic Institute; 2009. p. 84-109.
3. Concato J, Shah N, Horwitz RI. Randomized, controlled trials, observational studies, and the hierarchy of research designs. *N Engl J Med* 2000;342(25):1887-92.
4. The National Alliance for Health Information Technology. Department of Health and Human Services. Report to the Office of the National Coordinator for Health Information Technology on Defining Key Health Information Technology Terms. http://healthit.hhs.gov/defining_key_hit_terms. Accessed December 2, 2013.
5. HIPAA. The Health Insurance Portability and Accountability Act of 1996. Pub.L. 104-191, 110 Stat. 1936 1996 August 21, 1996.
6. Green SB, Raley PL. What to look for in a randomized controlled trial. *Sci Ed* 2000;23(5):157.
7. Sibbald B, Roland M. Understanding controlled trials. Why are randomised controlled trials important? *BMJ* 1998;316(7126):201.
8. Barlow WE, Ichikawa L, Rosner D, et al. Analysis of case-cohort designs. *J Clin Epidemiol* 1999;52(12):1165-72.