

University of Wisconsin Center for Tobacco Research and Intervention (UW-CTRI)
Healthcare Reform and Health Information Technology
Terms and Definitions
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Accountable Care Organization (ACO)

An accountable care organization (ACO) is a type of payment and delivery reform model that ties provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients. An ACO is formed by a group of coordinated healthcare providers, and is accountable to patients and third-party payers for the quality, appropriateness and efficiency of the healthcare provided. Although the model is designed to be flexible, three core principles have been defined for all ACOs. They state that ACOs are provider-led organizations with a strong base of primary care, collectively accountable for quality and per capita costs across the full continuum of care; ACO payments are linked to quality improvements that also reduce overall costs; and ACOs have a reliable and progressively more sophisticated performance measurement to support improvement and provide confidence that savings are achieved through improvements in care.

Affordable Care Act

The Affordable Care Act (ACA) is a landmark health bill signed into law by President Barack Obama in 2010. The law mandates universal healthcare coverage for all Americans, and requires massive shifts in the way healthcare is practiced in the US. Among those changes, doctors will be reimbursed based on the quality of care that they provide, as opposed to receiving a set fee for the services they provide. The ACA mandates large shifts in the IT infrastructure of healthcare as well. The ACA has met fierce criticism and worked its way up to the Supreme Court, which ultimately upheld its constitutionality.

American Recovery and Reinvestment Act (ARRA)

Congress passed the American Recovery and Reinvestment Act on February 17, 2009. President Obama signed the act into law four days later. A direct response to the economic crisis of 2008, the Recovery Act had three immediate goals: to create new jobs and save existing ones, to spur economic activity and invest in long-term growth and to foster more accountability and transparency in government spending. The law directed about \$150 billion in new funds to the healthcare industry. It included \$87 billion for Medicaid, \$24.7 billion to subsidize private health insurance for people who lose or have lost their jobs, \$19.2 billion for health information technology, and \$10 billion for the National Institutes of Health (NIH). The act also provided \$650 million to support prevention and wellness activities targeting obesity, smoking, and other risk factors for chronic diseases as well as \$500 million for health professions training programs, including \$300 million to revitalize the National Health Service Corps (NHSC).

Clinical Decision Support (CDS)

Clinical decision support is a process for enhancing health-related decisions and actions with pertinent clinical knowledge and patient information to improve health and healthcare delivery. The information delivered can include general clinical knowledge and guidance, processed patient data or both. Information delivery formats can be drawn from options that include data and order entry facilitators, filtered data displays, reference information, alerts and more. Clinical decision support systems (CDSS) form a significant part of the field of clinical knowledge management technologies through their capacity to support the clinical process and use of knowledge. These systems are typically designed to integrate a medical knowledge base, patient data, and an inference engine to generative case-specific advice.

Cloud computing

“Cloud computing” refers to delivering hosted services over the Internet. The services tend to be divided into three categories: infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS), and software-as-a-service (SaaS). A cloud service has characteristics that differentiate it from traditional hosting. It is sold on-demand, is elastic – so the user can have as much or as little of the service they want – and is fully managed by the provider. Recent innovations in virtualization, as well as improved access to high-speed Internet, have accelerated the growth of cloud computing.” A cloud can be either public or private. A public cloud sells services to anyone on the Internet; a private cloud is a data center or proprietary network that supplies hosted services to a restricted number of people. If a service provider chooses public cloud resources to create their own private cloud, the result is a virtual private cloud. Whether public or private, the goal of cloud computing is to provide scalable and easy-to-access computing resources and IT services.

Computerized Physician Order Entry (CPOE)

Computerized physician order entry is a system that allows direct entry of medical orders and instructions for the treatment of patients by a medical practitioner. The orders are communicated through a computer network to medical staff or other various departments responsible for fulfilling an order, including pharmacy, radiology or laboratory. Used properly, CPOE decreases delay in order completion, reduces errors related to handwriting or transcriptions, allows order entry at point-of-care or offsite, provides error checking for duplicate or incorrect doses or tests, and simplifies inventory and positing of charges. CPOE is being increasingly encouraged by organizations such as the Leapfrog Group because it has proven to be an important solution to reducing medical errors and improving healthcare quality and efficiency.

Direct Project

The Direct Project develops specifications for a secure, scalable, standards-based way to establish universal health addressing and transport for participants to send encrypted health information directly to known, trusted recipients over the Internet. The project itself does not run health information exchange services. Several federal agencies and healthcare organizations are already using the Nationwide Health Information Network, which is a set of standards, services, and policies that enable secure health information exchange over the Internet, to exchange information amongst themselves. The Direct Project expands the standards and service descriptions available to address the key Stage 1 requirements for Meaningful Use and provides an easy “on-ramp” for a wide set of providers and organizations looking to adopt. At the end of the project, there will be one nationwide exchange, consisting of the organizations that have come together in a common policy framework to implement the standards and services.

Electronic Health Record (EHR)

An electronic health record is a collection of patient health information generated by one or more meetings in any care delivery setting. An EHR typically includes patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports. It’s said to streamline clinicians’ workflow, and it has the ability to generate a complete record of a clinical patient encounter. EHRs focus on the total health of the patient. They go beyond standard clinical data collected in the provider’s office and include a broader view of the patient’s care. EHRs are designed to reach beyond the health organization that originally collected the data and are built to share information with other providers. EHRs’ most notable benefits include a secure sharing of data, which, in turn, results in more open communication and more involvement on the patient’s part.

Electronic Medical Record (EMR)

An EMR is a digital version of a paper chart in a clinician's office. It contains the medical and treatment history of the patients in one practice. An EMR allows a clinician to track data over time, easily identify which patients are due for preventative screenings, check how patients are doing on certain parameters such as blood pressure readings or vaccines and monitor and improve overall quality of care within the practice. An EMR is said to make the process of patient record-keeping easier, more accurate and comprehensive and more efficient. Doctors use specialized software, which allows them to enter information electronically and makes a patient's complete history available immediately. Physicians can use a desktop, laptop or electronic clipboard to navigate through patients' charts and record notes.

e-Prescribing

e-Prescribing is the ability to electronically send an accurate, error-free and understandable prescription directly to a pharmacy. Included in the Medicare Modernization Act of 2003, it represents an important means to improve the quality of patient care and was. The July 2006 Institute of Medicine report on the role of e-prescribing in reducing medication errors expanded its popularity, which helped spread awareness of its benefits. The adoption of standards to facilitate e-prescribing is one of the key action items in the plan to expedite the adoption on EMRs. The benefits of e-prescribing are many and include reducing illegibility; providing warning and alert systems, which reduce medication errors; and offering access to patients' medical history. E-Prescribing also reduces or eliminates phone calls and call-backs to pharmacies, eliminates faxes to pharmacies, streamlines the refill's requests and authorization processes, and increases patient compliance.

Health Information Exchange (HIE)

Health information exchange is the transmission of healthcare-related data among facilities, health information organizations and government agencies, according to national standards for interoperability, security and confidentiality. It is an important part of the health information technology (HIT) infrastructure under development in the U.S., and the associated National Health Information Network (NHIN). Development of HIE initiatives continues to grow. The HIE implementation challenge will be to create a standardized interoperable model that is patient-centric, trusted, longitudinal, scalable, reliable and financially sustainable.

Health Information Technology for Economic and Clinical Health (HITECH) Act

The Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act of 2009, was signed into law in February 2009. It promotes the adoption and meaningful use of health information technology. Subtitle D of the HITECH Act addresses the privacy and security concerns associated with the electronic transmission of health information, partly through several provisions that strengthen the civil and criminal enforcement of the HIPAA rules. The act stipulates that, as of 2011, healthcare providers will be offered financial incentives for demonstrating meaningful use of electronic health records (EHRs). Incentives will be offered until 2015. After that point, penalties may be charged for failing to demonstrate such use. The act also established grants for training centers for the personnel required to support a health IT infrastructure.

Health IT Policy Committee

The Health IT Policy Committee is a federal board created as part of the American Recovery and Reinvestment Act of 2009. The committee advises the National Coordinator for Health IT on the creation of a nationwide health IT infrastructure.

The committee comprises 20 experts in both the medical and technical professions. The experts were appointed by the Secretary of Health and Human Services, the acting comptroller general of the United States, the majority and minority leaders of the Senate, and the speaker and minority leader of the House of Representatives. A number of work groups have been formed as sub-committees and include those focusing on meaningful use, certification and adoption, information exchange and more.

Health IT Standards Committee

The Health IT Standards Committee makes recommendations to the National Coordinator for Health IT on standards, implementation specifications, and certain criteria for the electronic exchange and use of health information. Originally, the committee focused on the policies developed by the Health IT Policy Committee's initial eight areas. Four HIT Standards Committee workgroups have been formed as sub-committees to the parent FACA. These workgroups meet periodically to discuss their topics, present their findings at HIT Standards Committee meetings, and make recommendations to the HIT Standards Committee. They include those focused on clinical operations, clinical quality, privacy and security, implementation, vocabulary task force and a "power team summer camp."

Health Level 7 International (HL7)

Health Level 7 International (HL7) is a group dedicated to developing standards for the exchange of electronic health information. The organization's goal is to improve the interoperability of software applications used by the health care industry. It was founded in 1987 and accredited by the American National Standards Institute in 1994. The "7" in the organization's name refers to Layer 7 in the Open Systems Interconnection (OSI) reference model. It is the final layer in the communication model the International Organization for Standardization developed for OSI. The standards address message and data exchange, decision support, rules syntax, visual integration of applications, insurance claims, clinical documents such as discharge summaries, product labels for prescription medication, electronic health records and personal health records.

Healthcare Information and Management Systems Society (HIMSS)

HIMSS is a nonprofit, cause-based organization focused on providing global leadership for the optimal use of information technology and management systems for the betterment of healthcare. The organization was founded in 1961 and has related organizations headquartered in Chicago, with additional offices in the US, Europe, and Asia. HIMSS represents more than 38,000 individual members of which more than two thirds work in healthcare provider, governmental, and not-for-profit organizations. HIMSS also includes more than 540 corporate members and more than 120 nonprofit organizations that share the same mission. The organization frames and leads healthcare practices and public policy through its content expertise, professional development, research initiatives and media vehicles designed to promote information and management systems' contributions to improving the quality, safety, access, and cost-effectiveness of patient care.

Interoperability

Interoperability is a system or product's ability to work with other systems or products. The term is used often in either a technical system engineering sense, or in a broader sense – including social, political and organizational factors that impact system-to-system performance. Products achieve interoperability by either adhering to published interface standards or by making use of a "broker" of services that converts one's product interface into another product's interface instantaneously. With regard to healthcare, interoperability is looked upon as the ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of healthcare for individuals and communities. A more expansive notion of interoperability includes the uniform

movement of healthcare data, the uniform presentation of data, uniform user controls, uniform safeguarding data security and integrity, uniform protection of patient confidentiality and uniform assurance of a common degree of system service quality.

Meaningful Use

Meaningful use is a qualification to receive federal funding for health information technology, specifically, the use of electronic health records. According to the provisions of the Healthcare Information Technology for Economic and Clinical Health Act (HITECH), healthcare organizations that have achieved meaningful use by 2011 will be eligible for incentive payments, and those who have failed to achieve that standard by 2015 may be penalized. Stage 1 meaningful use criteria set the baseline for electronic data capture and information sharing. Stage 2 and Stage 3 (expected to be implemented in 2015) will continue to expand on that baseline.

Nationwide Health Information Network (NHIN)

The Nationwide Health Information Network is a set of standards, services and policies that enable secure health information exchange over the Internet. The network provides a foundation for the exchange of health information across diverse entities, within communities and across the country, helping to achieve the goals of the HITECH Act. It is comprised of a diverse set of federal agencies and non-federal organizations that have come together to securely exchange electronic health information. NHIN is considered a critical part of the national health IT agenda and enables health information to follow the consumer, be available for clinical decision making and support appropriate use of healthcare information beyond direct patient care to improve population health.

National eHealth Collaborative (NeHC)

National eHealth Collaborative is a public-private partnership that aims to enable secure and interoperable nationwide health information exchange through education and stakeholder engagement. NeHC was established through a grant from the Office of the National Coordinator for Health IT to build on the achievements of the American Health Information Community, a federal advisory committee to the U.S. Department of Health and Human Services until 2008. With a mission to promote the successful deployment of health IT and health information exchange nationwide, the collaborative offers a variety of programs for stakeholders and consumers such as the HIE Learning Network, its Consumer Consortium on eHealth stakeholder engagement program and NeHC University, a Web-based education program designed to provide stakeholders with timely and relevant information on health information technology and health information exchange in the United States.

National Quality Forum

Established in 1999, the National Quality Forum is a nonprofit organization based in Washington, D.C. NQF reviews and recommends use of standardized healthcare performance measures at the federal, state and private-sector levels, and promotes initiatives focused on enhancing the value of healthcare services. NQF members include purchasers, physicians, nurses, hospitals and fellow quality improvement organizations. Recently, NQF named Christine K. Cassel, MD, as president and CEO. To expand its health IT portfolio, NQF created the Health IT Advisory Committee in 2009. HITAC's mission is to promote input and collaboration among measure developers, electronic health record vendors and users on best practices to support performance measurement, reporting and improvement.

The Office of the National Coordinator for Health Information Technology (ONC)

The Office of the National Coordinator for Health Information Technology (ONC) is a staff division within the U.S. Department of Health and Human Services, primarily focused on implementing an

interoperable, private and secure nationwide health information system and supporting the widespread, meaningful use of technology. ONC was created in 2004 through an executive order by President George W. Bush, and was legislatively mandated in the Health Information Technology for Economic and Clinical Health Act (HITECH Act) of 2009. Farzad Mostashari, MD, a physician and public health expert, currently serves as the National Coordinator for Health Information Technology. He is preceded by physician and Harvard Medical School Professor David Blumenthal (2009- 2011), psychiatrist Robert Kolodner (interim 2006, permanent 2007-2009). The first national coordinator was physician and venture capitalist, David Brailer, MD, who served from 2004 until 2007.

SNOMED CT (Systematized Nomenclature of Medicine--Clinical Terms)

A comprehensive clinical terminology and one of a suite of designated standards for use in U.S. Federal Government systems for the electronic exchange of clinical health information and also a required standard in interoperability specifications of the U.S. Healthcare Information Technology Standards Panel. This use of a standard terminology enables the use of health information across borders, facilitates public health surveillance and supports evidence-based research.

Telehealth

Telehealth refers to any remote telecommunications healthcare providers use to interact with and manage patients. It can range from teleconferencing between patient and provider (or provider to provider) to advanced “high-quality online voice and video interactions” with a patient’s EHR, enabling healthcare providers and patients to interact with each other remotely. Properly implemented, telehealth can expand access and reduce costs of healthcare.

For example, patients with mobile devices can monitor and report on their own vital signs and manage treatment, eliminating the need for a trip to the doctor’s office. This process can save time and money for both the patient and the healthcare provider. Another example, in Arizona, makes use of telemedicine to link patients living outside of an area with stroke experience with qualified healthcare providers.

Source: <http://www.healthcareitnews.com/directory>

The **Healthcare IT Index** is a directory of terms that includes key people, organizations, technology and concepts within the healthcare IT industry.