

## Appendix A

## ECRM Concepts, Terms, and Definitions

One of the first steps in managing information in today's challenging environment is to understand what is being managed.

ARMA International defines **information** as "data that have been given value through analysis, interpretation, or compilation in a meaningful form."<sup>1</sup> Information frequently becomes the content of a document.

**Content** is defined as the intellectual substance of a document. It includes structured data as well as unstructured data such as text, symbols, images, video, and sound.<sup>2</sup>

A **document** is recorded information or an object that can be treated as a unit.<sup>3</sup> It is any analog or digital formatted and preserved "container" of data or information. Whether analog or digital, documents may include filled forms, transcribed reports, notes, results, and other representations of structured and unstructured data. All documents are potential records; however, not all potential records are documents.

A **record** is defined as information created or received in the transaction of business and maintained as evidence in pursuance of legal obligations.<sup>4</sup> Common characteristics of records include lifecycle progression (creation or receipt, maintenance, use, security, and destruction), retention schedules, evidentiary value, and the ability to lock the content. Records can consist of discrete data elements or structured data as well as unstructured data contained in documents.

The Sedona Conference's Working Group on Electronic Document Retention and Production has identified the characteristics of electronically stored and generated information that indicate how its production is different than that stored on paper:

- The sheer volume of electronic information is greater than that stored on paper and is created and replicated at much greater rates.
- Electronically stored information is more difficult to destroy than information stored on paper documents.
- Large amounts of electronically stored information are associated with or contain information (metadata) that are not readily apparent on screen views of electronic files.
- Electronic information may be incomprehensible when separated from its environment.
- Electronic information may be stored in different locations including desktop and laptop computer hard drives, network servers, flash drives, CD-ROMs, and back-up tapes.<sup>5</sup>

These attributes of electronically stored information have

significant implications for how it is managed—that is, how the information is accessed and made available and how it is preserved, retained, and destroyed.

## Further Definitions

**Archive:** process of transferring records from the individual or office of creation to a repository authorized to appraise, preserve, and provide access to those records.<sup>6</sup> Archiving may also involve electronic record systems in which records or data are transferred from operational production systems to archive databases and storage media. Within electronic systems, the results of archiving may be transparent to the end user because the data may remain readily accessible.

**Destruction:** the process of eliminating or deleting records beyond any possible reconstruction.<sup>7</sup> Paper records can be destroyed by shredding with no opportunity to reconstruct. The process for destroying electronic records must include the primary system, legacy systems, backup procedures, and multiple systems with redundant representations of the record.

**Disposition:** a final administrative action taken with regard to records, including destruction, transfer to another entity, or permanent preservation.<sup>8</sup>

**Enterprise content management (ECM):** the technologies, tools, and methods used to capture, manage, store, preserve, and deliver content across an enterprise.<sup>9</sup>

**Electronic document management (EDM):** the electronic management of electronic documents contained in an information technology system using computer equipment and software to manage, control, locate, and retrieve information in the electronic system.<sup>10</sup>

**Electronic records management (ERM):** the electronic management of digital and analog records contained in an information technology system using computer equipment and software according to accepted principles and practices of records management.<sup>11</sup>

**Lifecycle:** the course of developmental changes through which information or an information system passes from initial creation through mature uses to final disposition or replacement.<sup>12</sup>

**Metadata:** data describing context, content, and structure of records and their management through time.<sup>13</sup> Metadata—sometimes described as data about data—helps index data while containing information regarding the properties, source, modification, revision history, and internal identifiers regarding the data.

**Nonrecord:** an item that is not usually included within the scope of official records (e.g., convenience file, day file, reference material, and draft); a document not required to be retained and therefore not appearing on a records retention schedule.<sup>14</sup>

**Purge:** the process of removing information from a file that has no further value, usually according to a records retention schedule.<sup>15</sup> *Note:* Data or information may be purged from production and operational systems to other archive storage systems or media and thus may continue to be retrievable. For example, analog, paper, or film-based records may be thinned, moved off-site for longer-term storage, or microfilmed. Electronic digital records also may be transferred to other archive storage systems or media, including near-line or off-line storage platforms.

**Records management:** the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use, and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records.<sup>16</sup>

**Taxonomy:** a structure used for classifying materials (in this case, records and data/information) into a hierarchy of categories and subcategories.<sup>17</sup> Because today most healthcare organizations are in a hybrid state in the transition to fully electronic health records, a taxonomy is critical for classifying the source, disposition, definition, retention requirements, and electronic implementation status of analog and digital records/data. ❖

## Notes

1. ARMA International. *Glossary of Records and Information Management Terms*, 3rd ed. 2007. Available online at [www.arma.org/standards/glossary/index.cfm](http://www.arma.org/standards/glossary/index.cfm).

2. Pearce-Moses, Richard. *A Glossary of Archival and Records Terminology*. Chicago, IL: The Society of American Archivists, 2005.
3. The International Organization for Standardization. "Information and Documentation—Records Management: Part 2. Guidelines." 2001. Available online at [www.iso.org/iso/catalogue\\_detail?csnumber=35845](http://www.iso.org/iso/catalogue_detail?csnumber=35845).
4. Ibid.
5. The Sedona Conference. *The Sedona Principles Addressing Electronic Document Production*, 2nd ed. June 2007. Available online at [www.thesedonaconference.org](http://www.thesedonaconference.org).
6. Pearce-Moses, Richard. *A Glossary of Archival and Records Terminology*.
7. The International Organization for Standardization. "Information and Documentation—Records Management."
8. ARMA International. *Glossary of Records and Information Management Terms*.
9. AAIM International and ARMA International. "Revised Framework for Integration of EDMS & ERMS Systems (ANSI/AIIM ARMA TR48-2006)." 2006. Available online at [www.aaim.org](http://www.aaim.org) and [www.arma.org](http://www.arma.org).
10. Ibid.
11. Ibid.
12. Ibid.
13. The International Organization for Standardization. "Information and Documentation—Records Management."
14. ARMA International. *Glossary of Records and Information Management Terms*.
15. Ibid.
16. Ibid.
17. Pearce-Moses, Richard. *A Glossary of Archival and Records Terminology*.

## Appendix B

# ECRM System Selection Techniques and Tools

System selection criteria vary by organization. Typical selection techniques and tools include the following.

**Request for information and request for proposal.** These tools enable the organization to frame its system requirements through objective criteria, which are then presented to prospective suppliers. The criteria should be concise, measurable, and definitive to avoid misinterpretation from suppliers.

**Best-of-breed and best-of-suite system selection.** Best-of-breed purchasers select software that provides market-leading features and functions regardless of the vendor. Best-of-suite purchasers select software that may be packaged to operate as a comprehensive application suite from one or more vendors or partners. Best-of-suite software products may have been proven to provide optimal performance across the suite. Either philosophy can influence the number of vendors reviewed in the selection process. When selecting ECRM systems, system integration, interfaces, and interoperability are most important to manage structured and unstructured data from disparate systems.

**System demonstrations.** After narrowing the field, the organization may arrange system demonstrations or site visits to view the software. It should be noted that system infrastructure systems are not as easily demonstrated as end user functions.

**Technical characteristics.** Technical criteria are important in determining if the organization has experience in managing the software requirements in question. Organizations frequently supplement in-house expertise with on-site consultant services, outsourcing, or off-site application ser-

vice providers. Technical considerations—such as operating systems, database management systems, mainframe or client-server environments, and redundancy, back-up, and data storage systems—must be evaluated for compatibility with existing and future IT system platforms.

**Stakeholder participation.** It is extremely important that the organization identify and include the appropriate stakeholders at the beginning of a system selection. These individuals or department representatives may include:

- The IT manager, who has the knowledge of the system's technical requirements, including its infrastructure and its ability to adapt into the environment. He or she can address initial storage and security questions.
- The HIM manager, who has the knowledge of the regulatory requirements or documentation, retention laws, and records management knowledge to maintain the information within the system.
- Data or clinical system department representatives, who have specific clinical knowledge of patient care and patient safety requirements.
- Representatives from the revenue cycle management and nonpatient care areas, who can evaluate enterprise content management systems for optimal support of financial and administrative activities.
- Risk management and legal representatives, who are necessary to ensure the system meets legal requirements for e-discovery, data retention, and destruction. ❖

## Appendix C

# Health Information Records and Content Management Scenarios

The following scenarios demonstrate common uses of ECRM technology in HIM functions.

**Record completion.** Federal and state regulations and accreditation standards require that hospitals establish timeframes for completion of records and the policies that define a complete record. The HIM record completion function requires both a mechanism for the assembly of records to ensure that all required information is contained in the record as well as a process to ensure that the missing content is added and completed within the required timeframes. Common ECRM technologies that potentially assist these processes include workflow automation; document management, including document assembly and version control; and categorization and classification tools.

**Release of information.** The process of responding to requests for disclosure of information requires ensuring both that only the minimum necessary information is disclosed and that all required information is disclosed. Hybrid records or records in multiple systems that are not well integrated pose a dual risk that requests for release of information will

exceed the minimum necessary standard in some cases and not contain all necessary information in others. This results from the inefficiencies of querying multiple systems for the requested information or carefully reviewing a category of information to ensure that only certain dates and types of service are being released.

COLD/ERM, document management, document imaging, search/retrieval, and taxonomy technologies can potentially address the issues and reduce the risk of error in the release of information process when records are hybrid or contained in multiple systems.

**Health record management and retention.** Legal and compliance needs require that record retention schedules be established and adhered to for all health records in both digital and analog forms. Technology that enables the declaration, capture, preservation, scheduling, disposition, and destruction of records is essential to effective management of all types of health records, but especially those in electronic form. ❖

**Appendix D**

# Enterprise Records Committee

## Suggested Staffing Model, Subcommittee Structure, and Responsibilities

**E**nterprise records committees may be formed in various ways. The following outline offers one suggested staffing model and subcommittee structure:

- Chairperson:** CIO
- Cochair:** Enterprise records and content manager
- Members:** Chair or appointed designee from each subcommittee  
 Director of information technology  
 Director of health information management  
 Compliance officer  
 Information security officer  
 Privacy officer  
 Representatives from:
- Nursing services
  - Business services
  - Pharmacy services
  - Laboratory services
  - Medical services (clinician)
  - Surgical services (clinician)
  - Mental health services (clinician)
  - Human resources
  - Employee education services
  - Quality improvement office

- Subcommittees:** Medical records committee  
 Forms and template committee  
 EHR steering committee  
 Privacy and information security committee  
 Compliance committee

The committee could be responsible for:

- Developing principles and procedures for the management of and access to data from internal and external sources. This may include health record and patient data; reports extracted from health record data; policies, procedures, and regulations; automated educational material; and Internet and extranet resources. ECRM strategies should effectively address organizational needs such as integration, collaboration, enterprise search,

and decision support.

- Developing principles and improving procedures for the communication of information throughout the organization and managing information effectively in order to increase value, reduce risk, and improve operational efficiency.
- Developing principles for the use of computerized systems, as well as training of employees on the use of these systems. This includes office automation systems, computer-aided educational systems, computerized patient record systems, and other automated systems as requested.
- Assessing the timeliness, accuracy, and availability of pertinent clinical, fiscal, and administrative reports.
- Assessing the completeness and pertinence of documentation in the health record.
- Monitoring the confidentiality, security, and integrity of data, computers, and networks, including the health record.
- Monitoring the organization's unmet information needs, including the need for equipment, software, education, security, policies and procedures, personnel, and support, and making recommendations to meet those needs.
- Ensuring compliance with Joint Commission standards in the area of information management.
- Ensuring the organization is in compliance with guidelines and regulations regarding information and information systems.
- Developing and enforcing policies and procedures related to information lifecycle controls, including appropriate retention and disposal requirements, thereby mitigating the risk of information loss or legal exposure.
- Providing recommendations as requested by business process owners or other committees as to the suitability and priority of requests for equipment, programming, services, and products for information systems.
- Conducting strategic planning for the information needs of the organization. Aligning current ECR activities with the organization's strategic goals for overall improvement in the quality of patient care, and with other strategic initiatives. ❖

**Appendix E**

# ECRM Sample Job Descriptions

**O**versight for the ECRM program is established by assigning executive responsibility with operations managed through an enterprise records and content manager in collaboration with information technology. Following are possible sample job descriptions.

<b>Executive Officer</b>			
<b>Alternate Title:</b>	Vice President		
<b>Job Status:</b>	Exempt		
<b>Function:</b>	A top-level executive officer and the principal decision maker with responsibility to ensure that the organization leverages information for maximum effectiveness enterprise-wide; protects information from a variety of threats and for a variety of purposes; monitors the use of information to ensure consistency in information practices; quantifies the value of information; and forecasts information that will be needed in order to make business units successful. Maintains information for legal compliance and long-term access.		
	<b>Chief Information Officer or Chief Technology Officer</b>	<b>Compliance Officer or General Counsel</b>	<b>Chief Records Officer</b>
	<ul style="list-style-type: none"> <li>• Creates, manages, controls, and directs information management throughout organization including all technology, technology support functions, and administrative services. Creates computing and services environment that reflects and supports organizational goals.</li> <li>• Performs role of the organization's information strategist. Participates in top-level decision making. Determines staff levels, equipment, and other resources required to meet objectives.</li> <li>• Chairs organization-wide information planning committees. Establishes liaison committees for intradepartmental communication (e.g., technologies, standards). Appoints and/or delegates appointment of committee members.</li> <li>• Establishes priorities and direction for operations and staff in light of organizational goals. Reviews departmental performance and, as necessary, changes direction to meet current requirements of the organization.</li> <li>• Directs the development of decision support systems that meet executives' and decision makers' requirements for inter/intradepartmental information, such as risk analysis, forecasting, and "what if" models.</li> </ul>	<ul style="list-style-type: none"> <li>• Creates, manages, controls, and directs activities related to information and records compliance with legal and regulatory requirements in all locations where the organization does business.</li> <li>• Develops and directs implementation of organizational policies and training programs regarding information and records-related compliance.</li> <li>• Oversees organizational compliance with audits and legal discovery processes.</li> </ul>	<ul style="list-style-type: none"> <li>• Directs all aspects of the organization's Records and Information Management (RIM) program.</li> <li>• Develops and implements strategies to meet business, legal, and regulatory requirements for records management and compliance.</li> <li>• Chairs organization's RIM Strategy Committee and appoints committee members.</li> <li>• Serves as the organization's RIM strategist. Participates in top-level decision making.</li> <li>• Determines staff levels, equipment, and other resources required to meet objectives.</li> </ul>

	<ul style="list-style-type: none"> <li>• Ensures that accurate and complete information from all media is furnished to users when and where it is required in order to manage and operate the organization efficiently. Oversees external data and information collection requirements.</li> <li>• Balances cost containment against systems applications advancements and services support requirements.</li> </ul>		
<b>Education/Experience:</b>	<p>Advanced degree in field relevant to nature of the organization and/or business. Eight or more years of management experience, including a minimum of two years senior management or executive experience. Background in information systems and technology, information resources management, administrative management, or law as it applies to information resources, security, and privacy.</p> <p>Must have an external focus to develop a direction for the organization by using information assets to drive that direction. To do this, must thoroughly understand the organization's strategic goals and objectives and the organization's key business. Must possess superior ability to analyze overall business and financial strategies and objectives in order to provide services, technology, and support.</p>		
<b>Related Certifications/Certificates:</b>	N/A		
<b>Principal Contacts:</b>	As an officer and decision maker of the organization, frequent contact is made with senior officers, divisional/departmental management, and outside sources to assist in completing strategic goals.		
<b>Enterprise Records and Content Manager</b>			
<b>Alternate Titles:</b>	Records and Information Manager (RIM), Senior RIM or ECRM Supervisor, Imaging Manager		
<b>Job Status:</b>	Exempt		
<b>Function:</b>	<p>Responsible for the organization's records and information management program and personnel. Manages, controls, and directs active records systems and centers, records organization and evaluation, inactive records systems, centers and maintenance, correspondence control, reports and directives control, and records retention. Provides expertise and input into other functional areas that affect the recorded information of the organization (e.g., reprographics, electronic information). Ensures that these functions fully support and implement the organization's records and information management policies. Directs people and programs to achieve the assigned responsibilities and results. Audits for organizational compliance on a regular basis. Uses tactical and business planning methods to achieve medium and short-term results. Is expected to pursue self-directed development.</p> <p>Also responsible for the organization's film- or computer-based imaging operations and personnel. Manages, controls, and directs production, quality assurance, and records of projects conducted by staff.</p>		
<b>Education/Experience:</b>	College degree with four to six years of relevant information management or business management experience. Professional certification may be required when appropriate. Requires comprehensive knowledge and understanding of the records and information management function(s).		
<b>Related Certifications/Certificates:</b>	Certified Records Manager (ICRM); ERM Master (AIIM); ECM Master (AIIM); Project Management Professional (PMI); Certified Information Privacy Professional (IAPP), HIM Credential (RHIA, RHIT)		

<b>Principal Contacts:</b>	Works closely with others in the organization to evaluate, research, and recommend information management solutions. Also works closely with vendors, suppliers, and other external sources to assist in the evaluation of systems. Is a member of professional organizations encompassing records and content/information management.
<b>Career Mobility:</b>	ECRM/RIM Director
<b>Information Technology Manager</b>	
<b>Alternate Title:</b>	IT Project Manager
<b>Job Status:</b>	Exempt
<b>Function:</b>	Responsible for managing all organization technologies and providing technology support and training. Primary duties include analyzing systems and processes; maintaining workstations and networks; and designing, developing, and maintaining Web-based applications.
<b>Education/Experience:</b>	Bachelor's degree (or equivalent) with specialized course work in information technology and at least four years of experience in a information technology environment.
<b>Related Certifications/Certificates:</b>	CDIA+ (CompTIA); ERM Master (AIIM); ECM Master (AIIM); Project Management Professional (PMI)
<b>Principal Contacts:</b>	Works closely with others in the organization to evaluate, research, and recommend information management solutions. Also works closely with vendors, suppliers, and other external sources to assist in the evaluation of systems.
<b>Career Mobility:</b>	Information Technology Director