



## **Certified Healthcare Document Management Administrator (CHDMA) Requirements**

This document contains the detailed requirements for the certification of a CHDMA, or Certified Healthcare Document Management Administrator. These requirements focus on general understanding of document management technologies, system architecture, and operations to allow candidates to properly plan, execute and manage these activities. Basic computer knowledge and operations is a pre-requisite.

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Item:	The candidate should be able to:	Keywords:
<b>1 Healthcare IT introduction related to document management</b>		
1 Healthcare Informatics defined	Define Healthcare informatics. Identify the various steps that result in visualizing healthcare information	Healthcare informatics. Steps to process healthcare information: collect, data entry, analyze and process, archive, manage, distribute, display.
2 Justification	Describe the value proposition of electronic management of information through simultaneous availability, implementation of medical alerts, drug interactions, centralized ordering and coding input.	Quality and efficiency of healthcare delivery
3 Benefits	Demonstrate cost savings and clinical benefits. Explain how EHR's address the 5 R's.	5 R's, EHR impact on savings
4 Industry trends	Recognize the trend for electronic management of information, especially documentation and how this will continue to evolve over the next several years though strong demand. Re-iterate the current state of electronic health record implementations. List the advantages of electronic charts	Digital vs. analogue, digital divide
5 Hardware Architecture	Describe the different components of a healthcare informatics system from a hardware perspective.	acquisition, connectivity, archiving and information management, distribution and viewing.
6 Software Architecture	Describe the different components of a healthcare informatics system from a software perspective.	OS, drivers, application software.
7 Infrastructure	Describe the different components of a healthcare informatics system from an infrastructure perspective.	network, routers, cables, connectors, 10baseT, 100baseT, Gbitsec, fiber, twisted pair (CAT), RJ connectors.
8 Systems Architecture	Describe the different components of a healthcare informatics system from a systems perspective.	HIS, PMS, RIS/LIS, EMR
9 EMR/PHR characteristics	Identify how the PHR, EMR and EHR differ with regard to application and domain.	EHR,EMR, PHR management, users, emphasis, access and legality
10 EHR Architecture	List the EHR components	EHR core, Input sources, EDMS, Peripherals, clinical messaging, external interfaces, portals and billing. Specialties, departments, CDMS, security
11 Document management	Explain the role of document management and why transitioning from paper to electronic files is critical	Document Management, DMS, records, forms, reports, directives, manuals, archive

<b>Item:</b>	<b>The candidate should be able to:</b>	<b>Keywords:</b>
12 EDMS	List the Electronic document management functions: Identify mechanism such as scanners, CD's, direct connect	EDMS, document management, capture, index, retrieve, management, processing, signing. Management features: version control, access controls and audit trails, CMS, report management, workflow management
13 Content management	Recognize the content management aspects and its function in the overall architecture	Content Management, CMS
14 Meaningful use	Describe the Meaningful use objectives and components,	meaningful use, 3 stages, ONC, HITech act, ARRA, CMS, objectives
15 Meaningful use requirements and incentives	List the incentives and penalties for MU implementation, distinguish between the different stages, define role of certification	incentives, certification, quality improvement
<b>2 Requirements and preconditions</b>		
1 Strategy	Define a strategy for managing the digitization of documentation and the role of document management in the overall picture	Strategic Plan
2 Analysis	Analyze the documentation needs looking at the various processes. Perform workflow analysis. Re-engineer processes.	data analysis, processes, workflow, document analysis, stakeholders, process improvement
3 Regulatory compliance	Identify the various legal requirements that need to be taken into account managing documentation	FDA, joint commission
4 Security and privacy	List the requirements defined by the US federal HIPAA regulations that are applicable to document management	Security, privacy, policies and procedures, CPO and CSO, risk analysis, authorization, authentication, TPO rule, PHI
5 Patient safety	List goals as defined by the national patient safety goals	patient ID, read-back, codes
6 Patient identification	Explain the need for a unique patient identifier or index.	Patient ID, MPI, registry, directory, PIX
7 Document sharing	Demonstrate how documents are being exchanged among different domains and entities.	XDS, XDS-I, actors, source, repository, registry, consumer, patient identity feed
8 Document exchanges	Identify the document exchange entities beyond the own enterprise	RHIO, HIE, NHIN, REC
9 Coding and vocabularies	Know when, where and why to use coding. List the various vocabularies and their specific application and domains. Recognize ICD 9 and ICD 10 codes	Semantic interoperability, classifications. CPT, ICD-9, ICD-10, HCPCS, WHO, HIPAA
10 Document Input sources	List the input sources with their functionality	emails, waveforms, voice files, faxes, lab data, paper
11 Physician office and hospital environment	List the various tools and devices that are used in a healthcare provider environment.	computers, tablets, COW's, printer and scanners

<b>Item:</b>	<b>The candidate should be able to:</b>	<b>Keywords:</b>	
12	Medical specialties	Explain the different departments and specialties and their relationships	radiology, cardiology, oncology, lab, pharmacy, OR, etc.
13	Planning	Plan resources and equipment based on throughput and productivity as well as turn-around requirements	project plan, PERT chart, resource allocation, quality plan, procurement plan
14	Migration	Identify the needs for migration of the information and plan according to on-line requirements	policies, migration, data conversion, orphan data, strategies
15	Retention	Generate rules for data retention and retirement	retention, legal requirements
16	Policies/procedures	Define a set of policies and procedures for managing documentation	Governance, competencies, operations, maintenance, disaster recovery and back-up
<b>3 Scanning technology</b>			
1	Document preparation	Perform the document preparation and feed steps	order, sort, remove staples, separation, index, mark, batch, simplex and duplex
2	Scanner features	List and comprehend the impact on the operation of the various scanner features	size, volume, capacity, resolution, connectivity, intelligent scanning, document type
3	Scanner types	Select the appropriate scanner type for an application	flatbed, feeders, production, check, handheld, labels, PDA's, film
4	Lamp and detector technology	Explain the different lamp and detector technologies and select the correct technology for a particular application	Xenon, fluorescent, LED, CCD, CIS technology, digital camera
5	Document quality factors	Compare the different resolution and dynamic range and select the appropriate setting for its applications. Distinguish between the grayscale and color encoding and describe the specific color encoding technique	optical and spatial resolution, bit map, bit depth, dpi, ppi, spi, color encoding, grayscale, density range, photometric interpretation, optical density, OD
6	Digital encoding	Calculate the required memory and translate in appropriate sizing	digital encoding, bits, bytes, Kbytes, Mbytes, Gbytes, Terabyte, Petabyte
7	Contrast range	Explain the impact of different bit depths on the image quality	bit depth, shade of grey
8	Physical Interfacing	Identify the type of interface that is used to connect a scanner to a computer	interface, parallel, GPIB, SCSI, USB, fire wire, network
9	API interface	Identify the type of API or software interface that is used to connect a scanner to a computer	TWAIN, SANE, WIA, ISIS
10	File formats	List the different file formats and explain the various compression techniques and its impact on image quality. Select the most effective file format depending on the application	compression, JPEG, TIFF, PNG, BMP, DICOM, PDF, WORD, RTF, TXT, CDA, WAV, MPEG, Wavelet
11	Intelligent scanners	Distinguish where the intelligence is located for the scanning application and determine whether there are gaps or overlap in functionality	intelligent scanners, firmware, middle ware

<b>Item:</b>	<b>The candidate should be able to:</b>	<b>Keywords:</b>	
12	Indexing	Identify the indexing technique that is used	labeling, indexing, bar-coding, separation, auto-indexing, reconciliation
13	Character recognition	Explain how Optical character recognition will assist in identifying a document with a person and/or record	OCR, ICR, zonal OCR, pattern recognition, ASCII
14	Bar-coding	Explain how bar-coding will assist in identifying a document with a person and/or record	AIDC, UPC
15	Organization and configuration	Organize both equipment and human resources depending on the scanning requirements	Stand alone, networked, to cloud, workgroup, production, departmental scanning

#### **4 Documentation Management Workflow**

1	Document categories	Categorize the different document types and organize and identify appropriately based on chart tabs	Progress notes, lab results, medications, reports, records, orders, problems, consults, discharge summaries, medical history, PMH, HPI, consent forms, questionnaires
2	Document types	Identify the different document types and the corresponding scan requirements	Paper records, hard cards, films
3	Users of documents	Categorize the various users and identify what documents are needed based on their role and function	reception, physicians, nurses, administration, billing, coding
4	Disassembling and preparation	Prepare the documentation and organize them for proper identification and labeling. Organize and identify any additional documentation	organizing, dis-assembling, remove staples, etc., separation sheets, additional documents
5	Scan and marking	Organize scanning according to requirements. Mark documents electronically and physically.	single sheet, batch, combination, hard cards. Electronic marking
6	Quality control, file selection and send	Use the preview for quality control purposes, select appropriate format and destination	Preview, scan quality, orientation, data integrity. File format selection and destination
7	Re-assembly and discard	Re-assemble the documentation in an organized manner. Discard, shred and/or destroy based on the policies and guidelines	re-assemble and organization, policy, data retention rules, paper as well as electronic
8	Conversion options	Identify the different conversion methods and use the one that is appropriate	By schedule, alphabetical, post patient visit, archive
9	Configuration, automatic features	Set up the user window according to preferences and scan method. Use and configure the auto delete, orientation and separation features	index window, thumbnails, auto blank page deletion, content based orientation, separation
10	Fixing indexing and readability	Fix indexing wither manual, using OCR or by remote database query. Change contrast as needed	data base, SQL, zonal OCR. contrast, color and Black/white scanning

<b>Item:</b>		<b>The candidate should be able to:</b>	<b>Keywords:</b>
11	Centralized monitoring	Manage large departments by monitoring remotely and interpret audit trails and batch files	license and log-in tracking, batch monitoring, XML index files
12	Electronic stamping	Configure the electronic stamp contents	Bates numbering
13	Simple office environment scenario	Perform and identify the steps to use a document management system in a typical office environment	encrypted email, labs, pharmacy
14	Scan to PACS	Perform and identify the steps to scan documents into a PACS system	requisition, modality worklist, DICOM
15	Scan to business applications, EDMS, EMR	Perform and identify the steps to scan documents into a EDMS, EMR and to business applications	SharePoint, medical records, billing, images
16	Troubleshooting	Identify most common error conditions and know how to resolve them	jams, power issues, interface, text, artifacts, drivers, memory
17	Scheduled Maintenance	Identify basic maintenance activities and perform them	scanner: cleaning, calibration, refurbishing and computer: cleaning, anti-virus











