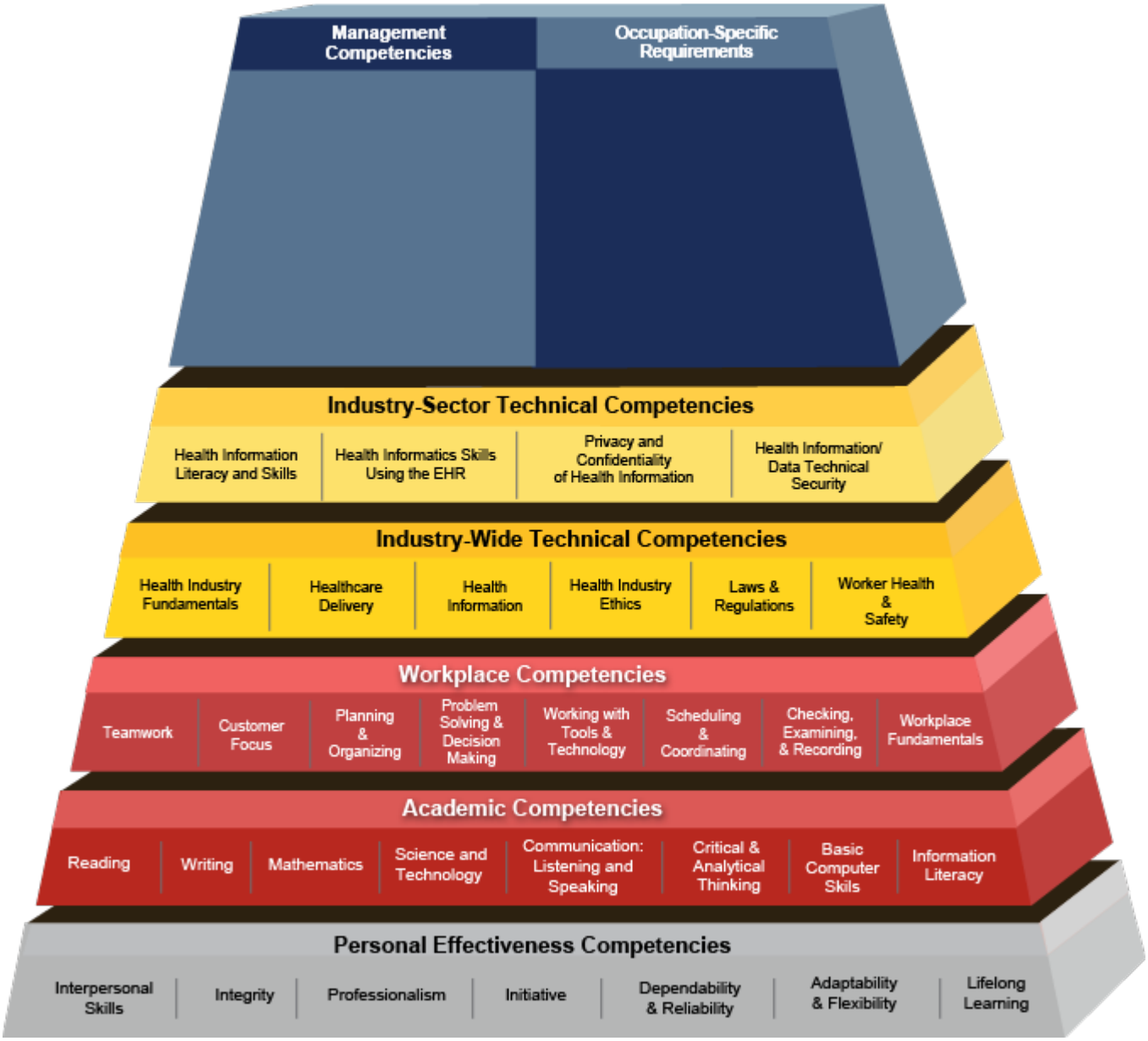
Attachment 1: Electronic Health Record (EHR) Competency Model

Electronic Health Records (EHR)

The model is available on the Competency Model Clearinghouse Web site
http://www.careeronestop.org/competencymodel/pyramid.aspx?EHR=Y



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About the Model

The Electronic Health Records (EHR) Competency Model is depicted in a graphic consisting of several tiers. The arrangement of the tiers in a pyramidal shape is not meant to be hierarchical, or to imply that competencies at the top are at a higher level of skill. The model's shape represents the increasing specialization and specificity in the application of skills as you move up the tiers. Tiers 1-5 have been developed and are divided into blocks. The blocks represent competency areas, that is, the applied skills, knowledge, abilities essential to successful performance in the increasingly electronic environment of the health industry. A table of the competency definitions and associated key behaviors follows the graphic.

Tiers 1 through 3 contain foundation competencies, which form the foundation needed to be ready to enter the workplace.

Tier 1 – Personal Effectiveness Competencies are shown as hovering below the pyramid because these competencies are essential for all life roles. Often referred to as "soft skills," personal effectiveness competencies are generally learned in the home or community and reinforced and honed at school and in the workplace. They represent personal attributes that may present some challenges to teach or assess.

Competency – A cluster of related knowledge, skills, and abilities that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development.

Tier 2 – Academic Competencies are critical competencies primarily learned in a school setting. They include cognitive functions and thinking styles. Academic competencies are likely to apply to all industries and occupations.

Tier 3 – Workplace Competencies represent motives and traits, as well as interpersonal and self-management styles. They generally are applicable to a large number of occupations and industries.

Tiers 4 and 5 contain industry competencies, which are specific to an *industry or industry sector.* Cross-cutting industry-wide technical competencies make it possible to create career lattices within an industry wherein a worker can move easily across industry sub-sectors. Rather than narrowly following a single occupational career ladder, this model supports the development of an agile workforce.

Tier 4 – Industry-Wide Technical Competencies represent the knowledge and skills that are common across sectors within a broader industry. These technical competencies build on, but are more specific than, competencies represented on lower tiers.

Tier 5 – Industry-Sector Technical Competencies represent a sub-set of industry technical competencies that are specific to an industry sector.

The upper tiers represent the specialization that occurs within specific *occupations* within an industry. Information on occupational competencies is available through O*Net OnLine (http://online.onetcenter.org/).

Tier One – Personal Effectiveness Competencies

1. <u>Interpersonal Skills</u>: Demonstrating the ability to work effectively with others.

Demonstrating concern for others

- Show sincere interest in others and their concerns
- Demonstrate sensitivity to the needs and feelings of others
- Look for ways to help people, and pitch in to help others

Demonstrating insight into behavior

- Recognize and accurately interpret the verbal and nonverbal behavior of others
- Show insight into the actions and motives of others
- Recognize when relationships with others are strained

Maintaining open communication

- Maintain open lines of communication with others
- Encourage others to approach him/her with problems and successes
- Establish a high degree of trust and credibility with others

Respecting diversity

- Demonstrate sensitivity and respect for the opinions, perspectives, customs, and individual differences of others
- Value diversity of people and ideas
- Deal with a wide range of people with flexibility and open-mindedness
- Listen to and consider others' viewpoints
- Work well and develop effective relationships with diverse personalities

2. <u>Integrity</u>: Displaying accepted social and work behaviors.

Behaving ethically

- Abide by a strict code of ethics and behavior
- Choose an ethical course of action and do the right thing, even in the face of opposition
- Encourage others to behave accordingly

Acting fairly

- Treat others with honesty, fairness, and respect
- Make decisions that are objective and reflect the just treatment of others

Taking responsibility

- Take responsibility for accomplishing work goals within accepted timeframes
- Accept responsibility/accountability for one's decisions and actions and for those of one's group, team, or department
- Attempt to learn from mistakes

3. <u>Professionalism</u>: Maintaining a professional demeanor at work.

Demonstrating self-control

- Demonstrate self-control by maintaining composure and keeping emotions in check even in very difficult situations
- Deal calmly and effectively with stressful situations

Professional appearance

- Maintain a professional demeanor
- Dress appropriately for occupation and its requirements
- Maintain appropriate personal hygiene
- Wear appropriate identification
- Remain free from substance abuse

Maintains a positive attitude

- Project a professional image of oneself and the organization
- Demonstrate a positive attitude towards work
- Take pride in one's work and the work of the organization

4. <u>Initiative</u>: Demonstrating a willingness to work.

Persisting

- Pursue work with energy, drive, and a strong accomplishment orientation
- Persist and expend extra effort to accomplish tasks even when conditions are difficult or deadlines are tight
- Persist at a task or problem despite interruptions, obstacles, or setbacks

Taking initiative

- Go beyond the routine demands of the job
- Take initiative in seeking out new work challenges and increasing the variety and scope of one's job
- Seek opportunities to influence events and originate action
- Assist others who have less experience or have heavy workloads

Setting challenging goals

- Establish and maintain personally challenging but realistic work goals
- Exert effort toward task mastery
- Bring issues to closure by pushing forward until a resolution is achieved

Working independently

- Develop own ways of doing things
- Perform effectively even with minimal direction, support or approval and without direct

supervision

- Strive to exceed standards and expectations
- Exhibit confidence in capabilities and an expectation to succeed in future activities

5. <u>Dependability and Reliability</u>: Displaying responsible behaviors at work.

Fulfilling obligations

- Behave consistently and predictably
- Fulfill obligations reliably, responsibly, and dependably
- Diligently follow through on commitments and consistently meet deadlines
- Demonstrate regular and punctual attendance

Attending to details

- Check work to ensure that all essential details have been considered
- Notice errors or inconsistencies that others have missed, and take prompt, thorough action to correct errors

Complying with policies

- Follow written and verbal directions
- Comply with organizational rules, policies, and procedures

6. <u>Adaptability & Flexibility</u>: Displaying the capability to adapt to new, different, or changing requirements.

Employing unique analyses

- Employ unique analyses and generate new, innovative ideas in complex areas
- Integrate seemingly unrelated information to develop creative solutions
- Develop innovative methods of obtaining or using resources when insufficient resources are available

Entertaining new ideas

- Remain open to considering new ways of doing things
- Actively seek out and carefully consider the merits of new approaches to work
- Embrace new approaches when appropriate and discard approaches that are no longer working

Dealing with ambiguity

- Take effective action when necessary without having to have all the necessary facts in hand
- Change gears in response to unpredictable or unexpected events, pressures, situations and job demands
- Change plans, goals, actions or priorities to deal with changing situations

7. Lifelong Learning: Displaying a willingness to learn and apply new knowledge and skills.

Demonstrating an interest in learning

- Demonstrate an interest in personal learning and development
- Seek feedback from multiple sources about how to improve and develop, and modify behavior based on feedback or self-analysis of past mistakes

Participating in training

- Take steps to develop and maintain knowledge, skills, and expertise necessary to achieve positive results
- Participate fully in relevant training and professional development programs
- Pursue opportunities to develop knowledge and skills

Anticipating changes in work

- Anticipate changes in work demands and searches for and participates in assignments or training that address these changing demands
- Treat unexpected circumstances as opportunities to learn

Identifying career interests

- Take charge of personal career development by identifying occupational interests, strengths, options and opportunities
- Make insightful career planning decisions based on integration and consideration of others' feedback, and seek out additional training to pursue career goals

Tier 2 – Academic Competencies

1. <u>Reading</u>: Understanding written sentences and paragraphs in work-related documents.

Comprehension

- Locate, understand, and interpret written information in prose and in documents such as manuals, reports, memos, letters, forms, graphs, charts, tables, calendars, schedules, signs, notices, applications and directions
- Understand the purpose of written materials
- Attain meaning and comprehends core ideas
- Locate definitions of unfamiliar terms
- Critically evaluate and analyze information in written materials
- Integrate and synthesize information from multiple written materials

Attention to detail

- Identify main ideas, implied meaning and details, missing information, and trends
- Note details, facts, and inconsistencies

Application

- Integrate what is learned from written materials with prior knowledge
- Apply what is learned from written material to follow instructions and complete specific tasks
- Apply what is learned from written material to future situations

2. <u>Writing</u>: Using standard English to compile information and prepare written reports.

Organization and development

- Prepare reports that are easy to understand using proper terminology
- Communicate thoughts, ideas, information, messages and other written information, which may contain technical material, in a logical, organized, and coherent manner
- Present ideas that are well developed with supporting information and examples

Mechanics

- Use standard syntax and sentence structure
- Use correct spelling, punctuation, and capitalization
- Use appropriate grammar (e.g., correct tense, subject-verb agreement, no missing words)
- Write legibly
- Proof read finished documents for errors

Tone

- Write in a manner appropriate for industry
- Use language appropriate for the target audience
- Use appropriate tone and word choice (e.g., writing is professional and courteous)

3. <u>Mathematics</u>: Using principles of mathematics to solve problems.

Quantification

- Read and write numbers
- Count and place numbers in sequence
- Recognize whether one number is larger than another

Computation

- Add, subtract, multiply, and divide with whole numbers, fractions, decimals, and percents
- Calculate averages, ratios, proportions and rates
- Convert decimals to fractions
- Convert fractions to percents

Measurement and estimation

- Take measurements of time, temperature, distances, length, width, height, perimeter, area, volume, weight, velocity, and speed
- Use and report measurements correctly
- Convert from one measurement to another (e.g., from English to metric or International System of Units (SI), or Fahrenheit to Celsius)

Application

- Perform basic math computations accurately
- Translate practical problems into useful mathematical expressions
- Use appropriate mathematical formulas and techniques

4. <u>Science and Technology</u>: Using scientific methods and technology to solve problems.

Comprehension

- Understand basic scientific principles and how to use commonly available technology
- Understand the scientific method (i.e., identifies problems, collects information, forms opinions and draws conclusions)
- Knowledge of Biology, Chemistry, Nutrition, Anatomy, Physiology, Physics

Application

- Understand overall intent and proper procedures for set-up and operation of equipment
- Apply basic scientific principles and technology to complete tasks

5. <u>Communication – Listening & Speaking</u>: Giving full attention to what others are saying and speaking in English well enough to be understood by others.

Speaking

- Express information to individuals or groups taking into account the audience and the nature of the information (e.g., technical or controversial)

- Speak clearly and confidently
- Speak using common English conventions including proper grammar, tone, and pace
- Track listener responses and reacts appropriately to those responses
- Effectively use eye contact and non-verbal expression

Listening

- Receive, attend to, interpret, understand, and respond to verbal messages and other cues
- Pick out important information in verbal messages
- Understand complex instructions
- Appreciate feelings and concerns of verbal messages

Two-way communication

- Practice meaningful two-way communication (i.e., speak clearly, pay close attention and seek to understand others, listen attentively and clarify information)
- Attend to nonverbal cues and respond appropriately

Persuasion/influence

- Influence others
- Persuasively present thoughts and ideas
- Gain commitment and ensure support for proposed ideas

6. <u>Critical & Analytical Thinking</u>: Using logic, reasoning, and analysis to address problems.

Reasoning

- Possess sufficient inductive and deductive reasoning ability to perform job successfully
- Critically review, analyze, synthesize, compare and interpret information
- Draw conclusions from relevant and/or missing information
- Understand the principles underlying the relationship among facts and apply this understanding when solving problems

Mental agility

- Identify connections between issues
- Quickly understand, orient to, and learn new assignments
- Shift gears and change direction when working on multiple projects or issues

7. <u>Basic Computer Skills</u>: Using a computer and related applications to input and retrieve information.

Comprehending the basics

- Understand and efficiently use basic computer hardware (e.g. Pcs, printers) and software (e.g. Word processing software, spreadsheet software) to perform tasks
- Understand common computer terminology (e.g., program, operating system) and possess familiarity with the fundamental capabilities of computers

Entering data

- Enter data into computer files quickly, with an acceptable degree of accuracy
- Double check data entry carefully
- Notice when data are missing or look wrong
- Take steps to ensure computer files are complete and accurate

Preparing documents

- Use word processing programs to create, edit, and retrieve document files
- Type materials quickly and accurately
- Check work carefully and identify/correct typographical errors
- Use basic reference materials and tools (e.g., spell check) to ensure accuracy

Keyboarding and word processing

- Skillfully use word-processing software
- Streamline document processing by employing a variety of common software functions
- Use correct style and format, even when confronted by uncommon requirements that deviate from standard guides
- Consult appropriate manuals when uncertain about the correct style and format

Internet applications

- Effectively use the internet and web-based tools to manage basic workplace tasks (e.g., timekeeping, maintaining employee records, conducting information searches)
- Understand and perform internet functions requiring the use of log-in and password information
- Understand and comply with guidelines surrounding internet usage
- Understand and comply with information security processes and guidelines

E-mailing

- Compose professional e-mails to communicate business-related information to coworkers, colleagues, and customers
- Understand the company e-mail system and its basic functions (e.g., replying to/forwarding messages, using electronic address books, attaching files)
- Ensure that key stakeholders are kept informed of communications by copying (i.e., "ccing") them on important e-mails when appropriate

Spreadsheets

- Use spreadsheet software to enter, manipulate, edit and format text and numerical data
- Effectively create and save worksheets, charts, and graphs that are well organized and useful

8. <u>Information Literacy</u>: Functional and critical thinking skills related to information, media, and technology.

Locate and Evaluate Information

- Locate information efficiently (time) and effectively (sources)
- Evaluate information critically and competently
- Review information obtained for relevance and completeness
- Recognize important gaps in existing information
- Take steps to eliminate those gaps

Use and Manage Information

- Use information accurately and creatively for the issue or problem at hand
- Manage the flow of information from a wide variety of sources
- Organize/reorganize information as appropriate to get a better understanding of a problem

Analyze Media

- Understand both how and why media messages are constructed, and for what purposes
- Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors

Tier 3 – Workplace Competencies

1. <u>Teamwork</u>: Working cooperatively with others to complete work assignments.

Acknowledging team membership and role

- Accept membership in the team
- Identify the roles of each team member
- Show loyalty to the team
- Determine when to be a leader and when to be a follower depending on what is needed to achieve the team's goals and objectives
- Encourage others to express their ideas and opinions
- Identify and draw upon team members' strengths and weaknesses to achieve results
- Learn from other team members

Establishing productive relationships

- Develop constructive and cooperative working relationships with others
- Exhibit tact and diplomacy and strive to build consensus
- Show sensitivity to the thoughts and opinions of other team members
- Deliver constructive criticism and voice objections to others' ideas and opinions in a supportive, non-accusatory manner
- Respond appropriately to positive and negative feedback

Identifying with the team and its goals

- Identify the goals, norms, values, and customs of the team
- Cooperate with others and contribute to the group's effort
- Use a group approach to identify problems and develop solutions based on group consensus
- Effectively communicate with all members of the group or team to achieve team goals and objectives

Resolving conflicts

- Bring others together to reconcile differences
- Handle conflicts maturely by exercising "give and take" to achieve positive results for all parties
- Reach formal or informal agreements that promote mutual goals and interests, and obtain commitment to those agreements from individuals or groups

2. <u>Customer Focus</u>: Actively looking for ways to meet customer or client needs.

Understanding customer needs

- Demonstrate a desire to understand client/patient needs
- Listen to what clients/patients are saying and asks questions as appropriate

Providing personalized service

- Provide prompt, efficient, and personalized assistance to meet the requirements, requests, and concerns of clients/patients
- Provide thorough, accurate information to answer clients/patients' questions
- Actively look for ways to help clients/patients by identifying and proposing appropriate solutions and/or services
- Establish boundaries as appropriate for unreasonable client/patient demands

Acting professionally

- Deal with internal or external customers in a pleasant, courteous, and professional manner
- Develop constructive and cooperative working relationships with clients/patients, and display a good-natured, cooperative attitude
- Deal with difficult clients/patients in a calm and empathetic manner
- Represent the organization to the public

Keeping customers informed

- Follow up with clients/patients
- Keep clients/patients up to date about decisions that affect them

3. <u>Planning & Organizing</u>: Planning and prioritizing work to manage time effectively and accomplish assigned tasks.

Planning

- Approach work in a methodical manner
- Plan and schedule tasks so that work is completed on time
- Keep track of details to ensure work is performed accurately and completely
- Work concurrently on several tasks
- Anticipate obstacles to project completion and develop contingency plans to address them
- Takes necessary corrective action when projects go off-track

Prioritizing

- Prioritize various competing tasks and perform them quickly and efficiently according to their urgency
- Find new ways of organizing work area or planning work to accomplish work more efficiently

Allocating resources

- Estimate resources needed for project completion
- Allocate time and resources effectively and coordinate efforts with all affected parties
- Keep all parties informed of progress and all relevant changes to project timelines

Project Management

Project management requires team work, team building, goal setting, organization, adaptation, communication

4. <u>Problem Solving & Decision Making</u>: Applying critical-thinking skills to solve problems by generating, evaluating, and implementing solutions.

Identifying the problem

- Anticipate or recognizes the existence of a problem
- Identify the true nature of the problem by analyzing its component parts
- Evaluate the criticality of the situation
- Use all available reference systems to locate and obtain information relevant to the problem
- Recall previously learned information that is relevant to the problem
- Document the problem and corrective action

Locating, gathering, and organizing relevant information

- Effectively use both internal resources (e.g., internal computer networks, manuals, policy or procedure guidelines) and external resources (e.g., internet search engines) to locate and gather information
- Examine information obtained for relevance and completeness
- Recognize important gaps in existing information and take steps to eliminate those gaps
- Organize/reorganize information as appropriate to gain a better understanding of the problem
- Refer the problem to appropriate personnel when necessary

Generating alternatives

- Integrate previously learned and externally obtained information to generate a variety of high-quality alternative approaches to the problem
- Use logic and analysis to identify the strengths and weaknesses, the costs and benefits, and the short- and long-term consequences of different approaches

Choosing a solution

- Choose the best solution after contemplating available approaches to the problem
- Make difficult decisions even in highly ambiguous or ill-defined situations

Implementing the solution

- Commit to a solution in a timely manner, and develop a realistic approach for implementing the chosen solution
- Observe and evaluate the outcomes of implementing the solution to assess the need for alternative approaches and to identify lessons learned

5. Working with Tools & Technology: Selecting, using, and maintaining tools and technology to facilitate work activity.

Selecting tools

- Select and apply appropriate tools or technological solutions to frequently encountered problems
- Carefully consider which tools or technological solutions are appropriate for a given job, and work with IT to consistently choose the best tool or technological solution for the problem at hand
- Set up and adjust equipment
- Monitor equipment and alert IT department if system is malfunctioning

Keeping current

- Demonstrate an interest in learning about new and emerging tools and technologies
- Seek out opportunities to improve knowledge of tools and technologies that may assist in streamlining work and improving productivity
- Read technical operating, service, or repair manuals to identify information

Troubleshooting

- Clean, inspect, and maintain equipment
- Troubleshoot tools and technologies
- Identify possible defects or other problems

6. Scheduling & Coordinating: Making arrangements and scheduling appointments.

Informing

- Respond to the schedules of others affected by arrangements
- Inform others of arrangements, giving them complete, accurate and timely information
- Ensure that others receive needed materials in time

Verifying

- Take steps to verify all arrangements
- Recognize problems, generate effective alternatives, and take corrective action

Coordinating in distributed environments

- Coordinate schedules of colleagues, co-workers, and clients to ensure that inconvenience is minimized and productivity is enhanced
- Leverage technology (e.g., internet, teleconference) to facilitate information sharing in distributed work environments

Shiftwork

- Disseminate crucial information in an organized manner to rapidly bring employees up to speed at the start of their shifts

- Ensure that employees are updated on work completed on past shifts and work that still needs to be completed

7. <u>Checking, Examining, & Recording</u>: Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic format.

Completing forms

- Select and complete appropriate forms quickly and completely
- Attend to and follow through on important information in paperwork
- Forward or process forms in a timely and accurate manner

Obtaining information

- Obtain appropriate information, signatures, and approvals promptly
- Verify that all information is complete and accurate before forwarding materials

Maintaining logs

- File documentation in accordance with agency requirements
- Keep logs, records, and files that are up-to-date and readily accessible
- Update logs, files, and records, noting important changes in status

Detecting errors

- Detect and correct errors and inconsistencies even under time pressure
- Identify vague or ambiguous documentation
- Route to appropriate person to correct documentation

8. <u>Workplace Fundamentals</u>: Knowledge of basic business principles, trends, and economics.

Situational awareness

- Understand the organization's mission and functions
- Recognize one's role in the functioning of the organization and understand the potential impact one's own performance can have on the success of the organization
- Grasp the potential impact of the organization's well-being on employees

Business ethics

- Demonstrate respect for coworkers, colleagues, and customers
- Act in the best interest of the client/patient, the organization, the community, and the environment
- Comply with applicable laws and rules governing work and reports loss, waste, or theft or company property to appropriate personnel

Tier 4 – Industry-Wide Technical Competencies

1. <u>Health Industry Fundamentals</u>: Knowledge of the basic components and emerging principles and concepts that impact the Health industry.

Critical Work Functions

- Understand the culture of the Health Industry: the key stakeholders, command and control processes, and workflow, and the concept that errors or negligence may result in harm to the patient
- Understand how changes in laws, regulations, or policies; or new and emerging technologies, impact the industry
- Understand the components of the Health Industry and services provided by each
- Identify one's role in the department, organization, and overall health environment

Technical Content Areas

Components of the Health Industry

Practitioners – Such as offices of:

- Physicians and Osteopaths
- Dentists
- Chiropractors
- Optometrists
- Podiatrists
- Physical and Occupational Therapists
- Psychologists
- Audiologists
- Speech and Language Pathologists

Treatment Facilities

Hospitals – Such as:

- Medical and Surgical
- Psychiatric and Substance Abuse
- Specialty
- Critical Access and Long Term Acute Care

Outpatient Centers

- Medical and Diagnostic Laboratories
- Ambulatory Surgery Centers
- Home Healthcare Services
- Other Ambulatory Services

Nursing and Residential Care Facilities – Such as:

- Skilled Nursing Facilities
- Residential Facilities for People with Disabilities
- Residential Care Facilities (assisted living) for the Elderly

Health Industry Related – Such as:

Public Health Agencies

Health Research Organizations

Pharmaceutical research companies

Health industry product vendors

2. <u>Healthcare Delivery</u>: Knowledge of the practices and procedures used to deliver quality patient care.

Critical Work Functions

- Describe the organizational structure and functions of major components of healthcare delivery
- Understand and implement patient safety practices that promote quality health outcomes, patient security, and health information security
- Understand the basic healthcare delivery models and their impact on work processes and information exchange.
- Differentiate among types of health insurance
- Understand the importance of licensure and scope of practice
- Understand patient rights and responsibilities
- Maintain professional boundaries
- Secure and maintain certification and licensure requirements for duties as required

Technical Content Areas

Roles and Responsibilities of Health Industry Workers in Healthcare Delivery Models, such as:

- Physicians, Surgeons, and Osteopaths
- Dentists
- Hospitalists
- Physician Assistants
- Nurse Practitioners
- Registered Nurses
- Licensed Practical Nurses
- Nurses Aides
- Therapists
- Laboratory Technologists
- Technicians
- Dieticians
- Pharmacists

Purpose and Functions of:

- Diagnostic Procedures
- Patient Safety Procedures
- Radiology and Scans
- Laboratory Tests
- Therapeutic Procedures
- Pharmaceutical Dispensing Procedures

Use of new technology e.g. Telehealth

- Diagnoses
- Monitoring
- Treatment

Scope of Practice

- Licensure, accreditation and certification requirements
- State and federal legislation/statues that govern the delivery of health services
- Impact one's own performance can have on the success of the organization

Health Insurance

- Health insurance options (HMO, PPO, EOP, POS, etc.)
- Medicaid/Medicare compliance guidelines
- Record-keeping (such as billing records, appropriate health documentation.)
- Confidentiality and accuracy of insurance information

3. <u>Health Information</u>: Knowledge of types of health information and rules and regulations surrounding their use.

Critical Work Functions

- Understand the role and importance of health information
- Identify and understand health documentation requirements
- Identify and understand health insurance documentation requirements
- Maintain the security and confidentiality of patient records, per HIPAA & other related regulations
- Understand the two-way flow of information and data through the medical organization (originating with both patient and provider)
- Ensure documentation in health records reflect completeness, accuracy, timeliness, appropriateness, quality, integrity, and authenticity as required.
- Use medical terminology within a scope of practice in order to interpret, transcribe and communicate information, data and observations
- Use appropriate procedures for submitting and accessing medical information through a Health Information Exchange
- Transmit documents (via internet or fax) in a secure manner

Dispose of patient information and records appropriately

Technical Content Areas

The Medical Health Record (paper, electronic, hybrid)

- History - What care has been provided and what is outstanding
- SOAP (Subjective, Objective, Assessment, Plan)
    - Outcomes of care provided and responses to the plan of care
    - Current patient status & assessments
    - Support decisions based on assessments to drive new plans of care
- Diagnoses
- Treatments, Procedures
- Progress notes
- Laboratory results
- Consents
- Nursing and other therapeutic monitoring reports
- Administrative and referral documentation
- Discharge summary and instructions

Health Information Exchange

- Software
- Access, retrieval, and submission procedures

Medical terminology foundations

- Diagnostic and procedure terms
- Roots, prefixes, suffixes, eponyms
- Abbreviations
- Acronyms

Record keeping and documentation procedures

- Confidentiality
- Release of information documentation

4. <u>Health Industry Ethics</u>: The discipline of evaluating and applying the merits, risks, and social concerns of activities in the field of health care.

Critical Work Functions

- Act in the best interests of the client/patient
- Report and prevent abuse and neglect
- Protect confidentiality of client/patient records
- Differentiate between ethical and legal issues impacting health care
- Make ethical decisions
- Respect clients rights and responsibilities
- Demonstrate an awareness of cultural competence in the context of cultural, social, and ethnic diversity

Technical Content Areas:

- Morality and ethics as they relate to health industry outcomes
- Ethical and legal issues impacting the health industries
- Confidentiality
- Problem solving techniques when confronted with ethical dilemmas or issues
- Problem sensitivity – the negative consequences of action/inaction
- Malpractice, liability, and negligence
- Expressed, informed, implied, and involuntary consent
- Patient's Bill of Rights
- National Standards on Culturally and Linguistically Appropriate Services (CLAS)
- Cultural sensitivity
- Language assistance services (e.g., bilingual staff and interpreter services)
- Service area demographics

5. <u>Laws and Regulations</u>: Knowledge of relevant local, state, and federal laws and regulations that impact the Health industry

Critical Work Functions:

- Apply the fundamentals of privacy and confidentiality policies and procedures
- Comply with applicable federal and state laws, policies, regulations and legislated rights of clients
- Practice responsibly within the ethical framework of the Patients' Bill of Rights
- Understand the legal responsibilities, limitations, and implications of actions
- Comply with policies and requirements for documentation, information security and record keeping
- Keep up to date on standards and government regulations
- Follow agency/facility policies and procedures

Technical Content Areas:

Client/Patient

- Client/Patient Bill of Rights
- Good Samaritan Law
- Client/patient advocacy

Laws and Regulations – Such as:

- Relevant state and local laws and regulations
- Privacy and confidentiality policies and procedures
- Protected Health Information (PHI)
- Health Insurance Portability and Accountability Act of 1996 (HIPAA) and updates
- Occupational Safety and Health Administration (OSHA)

- Clinical Laboratory Improvement Amendments (CLIA) Regulations
- Needle Stick Prevention Act
- Emergency medical treatment and active labor act (EMTALA) regulations

Voluntary Accreditation

- Joint Commission regulations
- American Osteopathic Association regulations

6. <u>Worker Health and Safety</u>: The procedures and protocols necessary to ensure a safe and healthy work environment.

Critical Work Functions:

- Understand and follow established personal safety, security, and environmental practices
- Ensure that equipment is being used safely
- Comply with local, state, federal, and organization health, safety, security, and environmental policies and regulations
- Follow emergency procedures and protocols

Technical Content Areas:

- Disease prevention/Infection control/Universal Precautions
- Safety signs, symbols, and labels
- Material Safety Data Sheets

Tier 5 – Industry-Sector Technical Competencies

1. <u>Health Information Literacy and Skills</u>: Knowledge of the existing and emerging principles and concepts of health records.

Critical Work Functions

- Describe the principles of structure, design, and use of health information (such as individual, comparative reports, and trended data).
- Differentiate between the types of patient health records (such as paper-based, electronic health record, personal health record)
- Be aware of complex workflows practiced in the delivery of patient care and in related business operations in order to efficiently and optimally migrate to a computerized environment
- Communicate health/medical information using standard definitions, vocabularies, terminologies and/or relevant data sets as used in the organization's health information systems
- Demonstrate knowledge of health information systems used by the organization including resources, routes, and flow of information
- Describe e-health initiatives as they relate to business and consumers (e.g., personal health, scheduling, screenings, evaluations, assessments)
- Identify barriers associated with computerized health data
- Know and apply policies and procedures regarding release of any patient-specific data to authorized users

Technical Content Areas

- Content and uses of health information
- Knowledge of: anatomy, physiology, disease processes, pharmacology, and medical terminology
- Content and format of types of medical records
- Organization policy regarding storage and transfer of information
- Health data sets (for example OASIS, HEDIS, UHDDS)
- Health terminologies and classification systems
- Health information systems
- Interoperability

2. <u>Health Informatics Skills Using the EHR</u>: Using technology to control and safeguard the collection, organization, structure, processing and delivery of health information.

Critical Work Functions

- Understand use of technology in maintaining electronic health records
- Create and update documents within the electronic health record (EHR) and the personal health record (PHR) using electronic tools and applications (including portable computing

devices, word processing, spreadsheet, database, and desktop presentation applications)

- Locate and retrieve information in the electronic health record for various purposes
- Understand the organization's mission and functions as it pertain to its EHR's application and its meaningful use
- Utilize mainstream software to complete job-specific tasks, and understand the interaction between mainstream and EHR technology.
- Follow security and privacy policies and procedures to the use of networks, including intranet and Internet.
- Follow confidentiality and security measures to protect electronic health information.
- Differentiate between primary and secondary health data sources and databases
- Identify classification and systematic health-related terminologies for coding and information retrieval
- Know the policies and procedures related to populating and using the health data content within primary and secondary health data sources and databases
- Resolve minor technological problems associated with using an EHR
- Utilize basic IT "troubleshooting" processes to identify the root cause of an IT-related problem
- Utilize IT Help Desk for problem resolution where necessary to maximize efficiency & effectiveness

Technical Content Areas

- Computerized Provider Order Entry (CPOE)
- Quality improvement and reporting
- E-Prescribing
- Specialized health information software applications (e.g., computer-based documentation systems for point-of-care, computerized physician order entry, coding)
- Mainstream software applications (e.g., spreadsheets, databases, email, Web 2.0, mobile applications)
- Hardware and communication technologies and formats related to personal health records

3. <u>Privacy and Confidentiality of Health Information</u>: Using standard documentation procedures to collect and communicate appropriate health information within legal and regulatory requirements.

Critical Work Functions

- Identify and apply legal and regulatory requirements related to the use, access, and disclosure of protected health information
- Explain legal responsibility, limitations, and implications of actions
- Identify what constitutes authorized use of protected health information
- Report any possible breaches of confidentiality in accordance with organizational policies

Technical Content Areas

- Legal and regulatory requirements for the storage and transfer of information
- Client/Patient Bill of Rights
- Client/Patient advocacy
- Protected Health Information (PHI)

4. <u>Health Information/Data Technical Security</u>: Applying confidentiality and electronic security measures to store and protect health information.

Critical Work Functions

- Adhere to applicable policies and procedures for the use of networks, including intranet and internet applications to facilitate the electronic health record (EHR), personal health record (PHR), public health records
- Implement administrative , physical, and technical safeguards
- Follow access protocols for entry to an electronic health record
- Understand and apply fundamental documentation requirements in the electronic creation and recordkeeping environment
- Recognize components of risk management, contingency planning, and data recovery procedures
- Report any possible breaches of confidentiality in accordance with organizational policies
- Resolve minor technology problems associated with using an electronic information application

Technical Content Areas

- Documentation principles and requirements
- Data storage and retrieval
- Data accessibility
- Data recovery procedures
- Data integrity (business continuity, disaster recovery, encryption, ID management)
- Security policies and procedures
- Privacy, confidentiality, legal, and ethical issues

Resources Reviewed

Developer	Resource	URL
Alaska Vocational Technical Center	Certified Nurse Assistant	http://www.avtec.alaska.edu/CNA-A.htm
American Association of Colleges of Nursing	Curriculum Standards	http://www.aacn.nche.edu/Education/curriculum.htm
American Health Care Association	Competencies for Senior Nurse Leaders in LTC	http://www.ahcancal.org/quality_improvement/leadership_excellence/Documents/competencies_report.pdf
American Health Information Management Association	Registered Health Information Administrator Competency Statements	http://www.ahima.org/downloads/pdfs/certification/RHIA_Job_Analysis.pdf
American Health Information Management Association	Registered Health Information Technician Competency Statements	http://www.ahima.org/downloads/pdfs/certification/AHIMA%20RHIT%20Job%20Analysis%20Report_with%20Addendum.pdf
American Health Information Management Association	Certified Coding Associate	http://www.ahima.org/downloads/pdfs/certification/CCA%20Exam%20Blueprint%20Crosswalk.pdf
American Health Information Management Association	Certified in Healthcare Privacy and Security	http://www.ahima.org/downloads/pdfs/certification/CHPS_Content_Outline.pdf
American Health Information Management Association	Joint Work Force Task Force: Health Information Management and Informatics Core Competencies for Individuals Working with Electronic Health Records (AMIA/AHIMA)	http://www.ahima.org/schools/FacResources/RESOURCEworkforce_2008.pdf
American Medical Informatics Association	Health Informatics Master's Degree	http://www.ahima.org/schools/FacResources/CurriculumMapHI_2010.pdf
American Society of Health Informatics Managers	Certified Health Informatics Systems Professional (CHISP) Certification	http://ashim.org/certification/
Association for Healthcare Documentation Integrity	Certified Medical Transcriptionist	http://www.ahdionline.org/ProfessionalPractices/BestPracticesandStandardGuidelines/CompensationforMedicalTranscriptionists/MedicalTranscriptionistJobDescriptions/tabid/278/Default.aspx
Austin Community College	ACAP Reports for: Addictions Counseling, Clinical Assistant, Dental Assistant, Dental Hygienist, Hemodialysis Technician, Licensed Vocational Nurse, Medical Assistants, Medical Coding Specialist, Medical Lab Technician, Medical Transcriptionist, Molecular Diagnostics, Paramedic, Patient Access Representative, Pharmacy Technician, Phlebotomy Technician, Registered Nurse, Sterile Processing Technician	http://irt.austincc.edu/ids/curriculum/acapReport.php
Bellevue Community College	Medical Informatics	http://bellevuecollege.edu/programs/degrees/proftech/medit/
California Department of Education	Health Science and Medical Technology Industry Sector	http://www.cde.ca.gov/ci/ct/sf/documents/ctestandards.pdf

Center for Excellence for Information and Computing Technology	Description of Healthcare Informatics Certificate	http://www.coeforict.org/research/health/
Center for Public Health Informatics	Competencies for Public Health Informaticians 2009	http://www.cphi.washington.edu/resources/PHICompetencies.pdf
Certification Commission for Healthcare Information Technology	An Introduction to Health IT Certification	http://ehrdecisions.com/wp-content/files/CCHITIntroToHealthIT20090324.pdf
Cincinnati State Technical and Community College	Health Information Technology (HIM)	http://www.cincinnatistate.edu/real-world-academics/academic-divisions/health-public-safety/programs-certificates-1/hps-curriculum/health-information-management-technology-curriculum
College of Direct Support	Community Support Skill Standards	http://www.collegeofdirectsupport.com/CDS50/content/CDSContent/csss.htm
Commission on Accreditation for Health Informatics and Information Management Education	Curriculum Requirements for Health Information Management	http://www.cahiim.org/policiescurriculum.html
Cosumnes River College (Los Rios Community College)	Health Information Technology Course Descriptions (Curriculum)	http://www.crc.losrios.edu/Areas_of_Study/Careers_and_Technology/Health_Information_Technology/Courses.htm
Cuyahoga Community College	Health Information Management (curriculum)	http://www.tri-c.edu/programs/healthcareers/healthinformation/Pages/ProgramSequenceHealthInformationManagement.aspx
Education Development Center, INC	IT Across Careers	http://itac.edc.org/
Healthcare Education Industry Partnership	Healthcare Core Curriculum	http://www.healthforceminnesota.org/Programs/Curriculum/
Healthcare Information and Management Systems Society	Web site	http://www.himss.org/ASP/index.asp
Hospital Corporation of America	Code of Conduct	http://hcaethics.com/CPM/Code%20Of%20Conduct%20Booklet.pdf
Institute for Caregiver Education	Nursing Assistant Training Curriculum	http://www.caregivereducation.org/products/products.htm
Job Corps	Certified Electronic Health Record Specialist Module	Hard Copy
National Alliance for Direct Support Professionals	NADSP Competency Areas	https://www.nadsp.org/dsp-credentialing/15-competency-areas.html

National Association of State Directors of Career Technical Education	Career Cluster Resources for Health Science; Human Services; and Science, Technology, Engineering and Math	http://www.careerclusters.org/
National Center for Healthcare Leadership	NCHL Health Leadership Competency Model	http://www.nchl.org/ns/documents/CompetencyModel-short.pdf
National Consortium on Health Science and Technology Education	Health Sciences Framework	http://www.healthscienceconsortium.org/health_science_cluster.php
National Consortium on Health Science and Technology Education	National Healthcare Foundation Standards and Accountability Criteria	http://www.healthscienceconsortium.org/healthcare_standards.php
National Consortium on Health Science and Technology Education	Health Informatics Pathway Standards and Accountability Criteria	http://www.healthscienceconsortium.org/docs/health_info_pathway.pdf
National Organization of Nurse Practitioner Faculties	Nurse Practitioner Core Competencies	http://www.nonpf.org/displaycommon.cfm?an=1&subarticlenbr=14
North Carolina Community College System	Health Information Technology Curriculum Standard	http://www.nccommunitycolleges.edu/Programs/docs/Curric_Standards/45/A45360_Health_Info_Tech_FA11_v3.pdf
Northern Virginia Community College	Health Information Technology, Associate in Applied Science Degree	http://www.nvcc.edu/curcatalog/programs/pdf/HLT-HIM-AAS.pdf
Office of Apprenticeship	Work Process Schedules for: Home Health Aide, Diet Therapy Specialist, Diagnostic Imaging Specialist, Dental Assistant, Health Services Management, Medical Laboratory Technician, Medical Service (Nurse, Licensed Practical), Optometry, Pharmacy Specialist, Public Health Specialist, Health Support Specialist, Medical Coding, Medical Transcriptionist,	http://www.careeronestop.org/CompetencyModel/search.aspx
Ohio Department of Education	Health Science Technical Content Standards	http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEPrimary.aspx?page=2&TopicRelationID=1769
Oregon Department of Education	Health Informatics Knowledge and Skill Statements	http://www.ode.state.or.us/teachlearn/subjects/oregonskillsets/healthserv/hlthadminoper/focusarealevel/hlthinfomaticsfaksall.pdf
Passaic County Community College	Health Information Technology (Course list)	http://prod.campuscruiser.com/q?pg=departments_listCourses&tg=DepartmentListCourses&action=reset&cmp=F22.0-27.0_7&cx=22.173-27.14336
Pitt Community College	Health Information Technology Degree or Diploma (curriculum and core competencies)	http://www.pittcc.edu/academics/programs/health-sciences/health-information-technology/HIT.pdf
Rochester Institute of Technology	Medical Informatics Curriculum	http://www.ist.rit.edu/pagefiles/MICSMS_Worksheet.pdf

Southern Illinois Collegiate Common Market	Health Information Technology Curriculum	http://www.siccm.com/HIT%20CURRICULUM.htm
St. Petersburg College	A.S. Healthcare Informatics Program (Curriculum)	http://www.spcollege.edu/program/HCINF-AS
St. Petersburg College	Healthcare Informatics Certificate (Curriculum)	http://www.spcollege.edu/program/HCINF-CT
Tennessee Department of Education	Health Informatics	http://state.tn.us/education/cte/hs/prof_curr/doc/hs_healthinform_profstu.pdf
Tidewater Community College – Virginia Beach Campus	Associate of Applied Science Degree: Health Information Management (Curriculum)	http://www.tcc.edu/academics/divisions/healthprofessions/hit/packet.PDF
University of Alabama at Birmingham	Health Information Management , Bachelor of Science (Curriculum)	http://main.uab.edu/shrp/default.aspx?pid=32639
US Department of Health and Human Services	Health Information Technology Web Site	http://www.hhs.gov/healthit/
US Department of Health and Human Services	National Standards on Culturally and Linguistically Appropriate Services (CLAS)	http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=15
US Department of Labor Job Corps	Training Achievement Record (TAR) for Certified Electronic Health Record Specialist	Hard Copy
US Department of Labor Occupational Information Network	O*NET Reports for: Registered Nurse, Personal and Home Care Aide, Home Health Aide, Medical Assistant, Medical Records and Health Information Technicians, Pharmacy Technician, Dental Assistant, Dental Hygienist, Physical Therapist, Mental Health and Substance Abuse Social Worker, Rehabilitation Counselor, Medical and Public Health Social Worker, Surgical Technologist, Occupational Therapist, Physician Assistant, Medical Transcriptionists, Medical Secretaries, Health Educator, Medical Equipment Repairer, Informatics Nurse Specialists	http://www.onetonline.org/find/industry?i=62&g=Go
Western Interstate Commission for Higher Education	A Closer Look at Healthcare Workforce Needs in the West: Health Information Technology	http://www.wiche.edu/pub/11530
Wisconsin Department of Public Instruction	Health Science Portfolio	http://dpi.wi.gov/cte/doc/healthsc.doc