Entry-to-Practice Competencies for Health Data and Information Management Professionals and Leaders

Baccalaureate Degree
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Unit 1: Applied Sciences and Health Systems

1.1 Demonstrate clear and concise written and oral communication to ensure accurate interpretation of information.
   1.1.1 Use proper grammar and spelling in written communications.
   1.1.2 Ensure thorough and logical explanations are founded on evidence-based information and written reports include proper scholarly or professional literature citations.
   1.1.3 Select or develop graphical representations and images to enhance communications and demonstrate appropriate understanding.

1.2 Use technology to attain and communicate information.
   1.2.1 Use digital technology, networks, and communication tools to find, evaluate, and communicate information.
   1.2.2 Use software packages that allow for the analysis and presentation of the data.

1.3 Apply knowledge of anatomy and physiology to support information literacy.
   1.3.1 Identify musculoskeletal and physiological body systems and functions.
   1.3.2 Integrate knowledge of body systems and functions in decision-making.

1.4 Apply knowledge of medical terminology to support information literacy.
   1.4.1 Integrate prefixes, suffixes, word roots, and combining forms of medical terms.
   1.4.2 Interpret proper phrases and terms of diseases, pathological conditions, and systems of the body.
   1.4.3 Use medical terminology and abbreviations within the correct context.

1.5 Apply knowledge of pathophysiology and pharmacology to ensure accurate communications and clinical coding.
   1.5.1 Recognize the physical and functional changes that occur with disease, injury, and the human life cycle.
   1.5.2 Describe diagnostic and therapeutic tests and procedures in disease processes and interventions.
   1.5.3 Identify generic and brand names and the indications for commonly prescribed drugs and agents.
1.6 Recognize the evolution and trends in the delivery of healthcare services in various settings.
   1.6.1 Identify types of healthcare organizations and systems.
   1.6.2 Differentiate the scope of practice of health professionals and healthcare services in various settings.

1.7 Apply fundamental statistical concepts and interpret various data sets using analytical tools.
   1.7.1 Apply knowledge of descriptive statistical methods for continuous and categorical data.
   1.7.2 Choose the appropriate statistical method and perform statistical analysis.
   1.7.3 Calculate descriptive and differential statistics and solve fundamental statistical problems.
   1.7.4 Interpret data and communicate results to various audiences.

1.8 Use a systematic approach to collecting, analyzing, and interpreting determinants of health and population health.
   1.8.1 Apply knowledge of epidemiology, human and environmental biology and behavioral sciences when collecting and analyzing data.
   1.8.2 Examine how the determinants of health influence population health and well-being of individuals, groups, communities, and populations.
   1.8.3 Articulate factors that influence local, state, and national health and social legislation and policy.
   1.8.4 Examine patterns of illness and injury in populations to prevent and control health problems.
   1.8.5 Identify optimal ways to capture determinants of health from the documentation.
   1.8.6 Examine the trends and current issues that impact community, population and global health, including new and reemerging diseases that spread through immigration, travel and international trade.

Unit 2: Professionalism

2.1 Lead advocacy efforts to advance the profession and support the integration of HIM into the organization.
   2.1.1 Advocate for health information services and resources that benefit patients, the organization and the population.
   2.1.2 Educate others on the scope of practice and role of health information management professions.
   2.1.3 Write proposals for equipment, resources, and new technologies.
   2.1.4 Engage in policy advocacy efforts.
2.2 **Engage in self-reflection and cultural humility to improve practice.**

2.2.1 Self-reflect on experiences and personal opinions, learn from others, and identify growth areas.

2.2.2 Recognize when services are beyond personal competence and consult or refer services to others.

2.2.3 Consider the relationship between the health information management role and the responsibilities of other team members.

2.2.4 Engage in continuing education and professional development.

2.3 **Demonstrate ethical behaviors.**

2.3.1 Recognize ethical issues and identify potential actions that support a positive outcome.

2.3.2 Identify and manage potential and actual conflicts of interest.

2.4 **Apply ethical frameworks to support decision-making and to guide others to resolve ethical issues.**

2.4.1 Evaluate and apply ethical frameworks to provide professional guidance.

2.4.2 Apply bioethics to identify and critically analyze moral questions and to manage ethical dilemmas.

2.4.3 Evaluate and apply ethical frameworks to provide professional guidance.

**Unit 3: Health Law and Policy**

3.1 **Analyze the impact of legislation regulations, licensure, and accreditation on health information management policy.**

3.1.1 Apply knowledge of the US legal system and legislative process.

3.1.2 Interpret legislation, regulation and judicial processes that impact health information management.

3.1.3 Identify licensure and accreditation standards that impact health information management.

3.1.4 Modify or develop policies and procedures correctly, citing legislation and regulations.

3.2 **Engage in activities that support compliance with privacy, security and confidentiality legislation and regulations.**

3.2.1 Apply privacy and security legislation when collecting, retaining, using, releasing, and destroying personal and health information.

3.2.2 Compare federal, state, and local privacy and security legislation and recommend actions to address discrepancies.
3.2.3. Use physical, technical, and administrative controls to ensure safeguards are in place to protect assets.

3.2.4. Identify the vulnerabilities and the risk of unauthorized access.

3.2.5. Investigate privacy breaches and communicate findings to mitigate future risks and support transparency.

3.2.6. Evaluate health information management policies and procedures and recommend changes to ensure compliance with legal requirements.

3.2.7. Identify potential and real cyber risks and define processes to mitigate and manage risks.

3.2.8. Validate legal documents to protect patients and the organization.

3.2.9. Participate in a review of a health information compliance plan to assess the level of compliance within the health system.

3.3 Monitor, analyze and report on healthcare fraud and abuse.

3.3.1 Differentiate between healthcare fraud and abuse as defined in legislation.

3.3.2 Identify the reporting requirements associated with healthcare fraud and abuse.

3.3.3 Create documentation integrity metrics to monitor coding activities.

3.3.4 Analyze data to identify trends and patterns of intentional or unintentional financial abuse and fraud.

3.3.5 Create reports that justify concerns and allegations of intentional or unintentional healthcare fraud and abuse.

3.4. Analyze the importance of state and federal reporting requirements.

3.4.1 Identify required elements for reporting vital statistics and notifiable diseases, abuse, and deaths.

3.4.2 Analyze physician and practitioner-compliant data to evaluate compliance with state regulatory, credentialing, and licensure requirements and recommend an improvement compliance plan.

Unit 4: Data Management

4.1 Manage the health record life cycle.

4.1.1 Identify the content of the health record and documentation.

4.1.2 Apply understanding of the health record life cycle.

4.1.3 Enter, export and sort health records data.

4.1.4 Analyze workflow within an electronic health record.
4.1.5 Identify components and interactions of software applications in the electronic health record.

4.2 Participate in procuring or evaluating electronic health records and other digital systems or technology.
   4.2.1 Identify health record requirements for various health organizations, including virtual environments.
   4.2.2 Participate in interoperability needs analysis.
   4.2.3 Evaluate various systems to identify the potential impact of interoperability, data exchange, data integrity and compliance with regulatory requirements and processes.
   4.2.4 Map electronic health record components and software integration data elements to ensure seamless data exchange.
   4.2.5 Complete interoperability needs analysis to ensure data integration is seamless.

4.3 Create data dictionaries, templates, flow sheets, and forms to configure and collect information and to ensure the meaning, relevance, and quality of data elements are the same for all users.
   4.3.1 Follow interoperability standards to ensure data sharing across systems.
   4.3.2 Create a dictionary with referential integrity requirements and parameters.
   4.3.3 Explore data collection templates, flow sheets and forms, and identify purposes for collecting data and the required data elements.

4.4 Use and evaluate advanced digital applications.
   4.4.1 Examine the trends, applications, benefits, and risks of AI and machine learning.
   4.4.2 Identify various AI applications and other advanced technologies used in healthcare operations.
   4.4.3 Identify the ethical implications of using artificial intelligence in healthcare operations.
   4.4.4 Validate the authenticity and reliability of the data generated by advanced technologies.
   4.4.5 Audit data generated from artificial intelligence and advanced technologies.

4.5 Participate in system configuration activities and follow interoperability standards to ensure data sharing across disparate systems.
   4.5.1 Apply system configuration practices to optimize the safe use of electronic health records.
   4.5.2 Complete interoperability needs analysis to ensure data integration is seamless.
   4.5.3 Anticipate and plan for changes in policies and procedures related to implementing a new system.
   4.5.4 Engage in the reconciliation of data to ensure accurate data sharing.
5.1 Acquire and manage clinical, financial, surveillance or administration data from electronic systems, portals, mobile applications, and artificial intelligence.
   5.1.1 Determine appropriate data collection methods considering end-user perspectives and needs.
   5.1.2 Acquire data from databases and different data sources through a single query and reporting interface.
   5.1.3 Conduct queries with advanced SQL techniques, including views, transactions, stored procedures and joins.

5.2 Participate in database architecture and design.
   5.2.1 Create physical and logical relationship diagrams for the EHR database function.
   5.2.2 Create relational databases and construct database commands.
   5.2.3 Query databases to search for, compile and modify data sets.
   5.2.4 Write rules for queries defining data elements and parameters for running the queries.

5.3 Conduct descriptive, diagnostic and predictive analytics.
   5.3.1 Evaluate data to ensure the application of statistical formulas in computing healthcare statistics.
   5.3.2 Identify data type and appropriate statistical application for the analysis.
   5.3.3 Use software and digital applications to perform a variety of data analyses.
   5.3.4 Interpret, calculate, and summarize data using various analytic and digital applications.
   5.3.5 Use data mining and predictive modelling.
   5.3.6 Interpret, calculate, and summarize data for benchmarking, consumer, or research purposes.

5.4 Present data in a way that influences decisions, policies, and care delivery models.
   5.4.1 Choose the type of visualization based on the audience and data set.
   5.4.2 Ensure correct data presentation to support accurate conclusions.
   5.4.3 Use various data analytic tools to create a visual display of data.
   5.4.4 Write a comprehensive report to inform decisions.
Unit 6: Clinical Coding

6.1 Use classification systems, nomenclature, and terminology for optimal code capture.
   6.1.1 Assess the appropriateness of coding selection utilizing various classification systems.
   6.1.2 Develop support for code assignment.
   6.1.3 Apply classification systems, methodologies, and approaches to validate the use of reliable data stratification.

6.2 Apply regulatory and payer transmittals coding and payment procedures and documentation.
   6.2.1 Manage coding activities to facilitate optimal financial reimbursement.
   6.2.2 Identify and report required changes to the revenue cycle based on payor requirements.
   6.2.3 Locate and navigate the CMS transmittal and other payor portals.

6.3 Examine the accuracy of coding technological resources (encoder and computerized-assisted coding) to validate accurate code selection.
   6.3.1 Recommend elements included in the design of audit trails and data quality monitoring programs.
   6.3.2 Identify discrepancies, potential quality of care, and billing issues.
   6.3.3 Select optimal systems to improve coding efficiency, compliance, and accuracy.
   6.3.4 Identify and correct problems with billing, coding and documentation to improve accepted claims.
   6.3.5 Identify opportunities to improve workflow efficiency and effectiveness.

Unit 7: Financial and Revenue Cycle Management

7.1 Manage the revenue cycle management process for financial health.
   7.1.1 Analyze revenue life-cycle management processes from the initial patient contact through billing, payment adjudication, and cash posting.
   7.1.2 Apply reimbursement methodologies and use payment systems for the continuum of care.
   7.1.3 Apply regulatory requirements for patient billing data collection, claim generation, and adjudication for reimbursement and compliance.
   7.1.4 Evaluate code assignment for accurate reimbursement from payer sources.
   7.1.5 Incorporate best practices in case mix management into the revenue cycle management process.
   7.1.6 Manage payer contracts agreements, including health insurance, managed care organizations, and government-sponsored healthcare programs.
7.2 Manage processes to collect accurate, complete, and current information and verify responsible payers.

7.2.1 Facilitate prior authorization and insurance eligibility activities.
7.2.2 Document patient encounters and data collection, including charge capture, coding, and charge entry.
7.2.3 Follow an established pricing estimate protocol to generate a transparent and compliant patient estimate of proposed services.
7.2.4 Identify underpayments by payors or failure to capture revenue.
7.2.5 Facilitate resolution of billing denials and appeals.

7.3 Ensure revenue integrity by managing and examining charge capture, coding, and documentation requirements.

7.3.1 Conduct third-party payer reviews related to billing, eligibility, and enrollment.
7.3.2 Perform queries and analyze financial and administrative data to identify over- or inappropriate utilization of services and recommend solutions.
7.3.3 Analyze claims and appeals data to identify frequency, patterns and trends and create strategies to mitigate loss and identify opportunities.
7.3.4 Monitor financial and administrative data to identify trends and omissions and recommend mitigation strategies.
7.3.5 Reconcile remittance advice and payment documentation for revenue cycle management.
7.3.6 Develop payor report cards presenting data to justify conclusions and propose solutions to mitigate risks and loss.

Unit 8: Quality, Risk Management and Safety

8.1 Participate in continuous quality improvement and total quality management activities.

8.1.1 Identify performance monitoring needs to support total quality management and continuous quality improvement initiatives.
8.1.2 Identify performance measures to track and analyze trends and areas of improvement.
8.1.3 Retrieve and analyze clinical quality measures to assess patient treatment quality and drive clinical action.
8.1.4 Audit the quality of patient records and report on issues and trends.
8.1.5 Retrieve and analyze patient record compliance data and report on findings.
8.2 Monitor and analyze risk management data to support mitigating risks, adverse events, and safety issues.
   8.2.1 Formulate an understanding of risk reduction performance measures used to identify system errors.
   8.2.2 Measure, analyze and report data to monitor adverse events, errors and accidents.

8.3 Design and conduct audits to identify compliance and performance issues and risks.
   8.3.1 Examine the accuracy of coding technological resources to validate accurate code selection.
   8.3.2 Recommend elements included in the design of audit trails and quality monitoring programs.
   8.3.3 Conduct an audit of health record data requirements and report on findings to promote workforce compliance with legal, regulatory, and accreditation requirements.
   8.3.4 Evaluate the organization’s preparedness for accreditation agency surveys relative to health information standards.
   8.3.5 Compile and generate an audit report aligned with accreditation standards.
   8.3.6 Make recommendations to resolve noncompliance issues.
   8.3.7 Educate the workforce on accreditation agency requirements.

Unit 9: Operational Management

9.1 Conduct business and provide services in a virtual environment.
   9.1.1 Interact with people virtually in their communities and other regions, states or nations.
   9.1.2 Apply advanced communication skills, including creating and using visuals to support transparent, engaging, and accessible interactions.
   9.1.3 Apply time management skills and productivity principles to ensure a conducive virtual environment.

9.2 Create and manage budgets for HIM initiatives, programs or departments.
   9.2.1 Identify the broad financial imperatives facing the health systems and the basics of good financial stewardship.
   9.2.2 Apply knowledge of various financial statements such as balance sheets, profit and loss statements and cost reports.
   9.2.3 Compare capital budgeting models and the long-term benefits to health systems.
   9.2.4 Prepare budgets to determine expenses, set spending limits and create a tracking system.
9.3 Engage in human resource activities to support the competent and productive performance of others.

9.3.1 Apply time management principles to monitor and enhance personal productivity and the productivity of others.

9.3.2 Sets and monitors clear targets for team members, departments and the organization aligned with common objectives and goals.

9.3.3 Apply employment legislation and articulate risks associated with noncompliance.

9.3.4 Assign responsibilities to various team members according to the scope of practice and competence.

**Unit 10: Leadership**

10.1 Apply leadership principles to guide services and lead others.

10.1.1 Apply leadership skills to foster a sense of belonging, trust, transparency, connection, and empowerment.

10.1.2 Practice shared decision-making and understand its impacts on internal and external partners.

10.1.3 Build confidence and capacity in individuals and team members through leadership, coaching and mentoring.

10.2 Participate in interprofessional collaboration activities and initiatives.

10.2.1 Identify professionals with legal authority to access electronic health records and their professional obligations to document patient care services.

10.2.2 Seek and incorporate different perspectives to co-create goals and objectives.

10.2.3 Develop health information management training for various individuals, groups, and populations.

10.2.4 Serve as a resource and subject matter expert to the inter and intra-disciplinary team.

10.2.5 Recognize interprofessional dynamics and their influence on HIM processes.

10.3 Apply project management skills and principles to achieve project goals and objectives within scope.

10.3.1 Engage in strategic planning and goal and object setting.

10.3.2 Create a project Charter outlining the project scope.

10.3.3 Develop a detailed project plan, including budgets, schedules, and timelines.

10.3.4 Use predictive, agile and hybrid approaches to meet project requirements and goals.

10.3.5 Identify and track potential and actual risks to the project and organization.
10.3.6 Prepare and deliver business communications such as meeting agendas, presentations, business reports and project communication plans.

10.4 Use critical inquiry to identify and address challenges and opportunities.

10.4.1 Apply innovative problem-solving methods and approaches drawn from knowledge of available resources, the body of knowledge and content.

10.4.2 Apply conflict resolution practices during difficult situations or conversations.

10.4.3 Analyze problems, promote solutions, and encourage decision-making.

10.4.4 Integrate evidence-informed practice, research principles and critical thinking into practice.

10.4.5 Articulate situational and emotional awareness when critically analyzing individual, team, and organizational functioning.

Unit 11: Research and Scholarly Activities

11.1 Apply current research and evidence-informed practice to services.

11.1.1 Determine the validity, reliability, and credibility of the information and research.

11.1.2 Examine and interpret research to determine the information's validity, reliability, and credibility.

11.2 Create training materials to support knowledge translation.

11.2.1 Assess the audience's readiness to learn and identify barriers to learning.

11.2.2 Apply adult learning pedagogy and education principles when developing, modifying and delivering training materials.

11.2.3 Use digital modes and technology to create training material.

11.3 Engage in research activities to support research initiatives.

11.3.1 Identify types of research and appropriate data analysis methodology based on the data type.

11.3.2 Differentiate among research methodologies, including qualitative and quantitative and recognize different data analysis methods.

11.3.3 Identify steps associated with conducting clinical trials and explore ethical issues.

11.3.4 Collect, code, retrieve and export research data.

11.3.5 Apply IRB or human subject protection requirements when engaged in research activities.

11.3.6 Interview research subjects to accurately collect data and apply human subject protection requirements and ethical research principles.
11.3.7 Conduct statistical analysis of the research data and generate visualizations to support the interpretation of the data.

11.3.8 Manage research participant payment and billing for clinical research activities.