

# HIM BACCALAUREATE DEGREE KNOWLEDGE CLUSTER CONTENT and COMPETENCY LEVELS (2006 and Beyond)

## **Health Data Structure, Content, and Standards**

- Structure and use of health information (individual, comparative, aggregate) (5)
- Health information media (paper, electronic/computer-based; e-health-personal, web-based) (5)
- Type and content of health record (paper, electronic, computer-based, e-health- personal, web based) (5)
- Data quality assessment and integrity (5)
- Secondary data sources (registries and indexes; databases – such as MEDPAR, NPDB, HCUP) (4)
- Healthcare data sets (such as OASIS, HEDIS, DEEDS, UHDDS, UACDS, NEDSS, NMMFS) (4)
- Health information archival systems (5)
- National Healthcare Information Infrastructure (NHII) (5)
- Data collection tools (such as forms; computer input screens; other health record documentation tools) (5)

## **Healthcare Information Requirements and Standards**

- Standards and regulations for documentation (such as JCAHO, CARF, COP, AAAHC, AOA) (5)
- Health information standards (such as HIPAA, ANSI, ASTM, LOINC, UMLS, MESH, Arden Syntax, HL-7) (5)

## **Clinical Classification Systems**

- Healthcare taxonomies, clinical vocabularies, terminologies/nomenclatures (such as ICD-9-CM, ICD-10, CPT, SNOMED-CT, DSM-IV) (4)
- Severity of illness systems (4)

## **Biomedical Sciences**

- Anatomy (3)
- Physiology (3)
- Medical Terminology (5)
- Pathophysiology (4)
- Pharmacotherapy (4)

## **Reimbursement Methodologies**

- Clinical data and reimbursement management (5)
- Compliance strategies and reporting (e.g. National Correct Coding Initiative) (4)
- Charge-master management (4)
- Casemix management (4)
- Audit process such as compliance and reimbursement (5)
- Payment systems (such as PPS, DRGs, APCs, RBRVS, RUGs) (4)
- Commercial, managed care and federal insurance plans (4)

## **Healthcare Statistics, Biomedical Research and Quality Management- Healthcare Statistics and Research**

- Statistical analysis on healthcare data (5)
- Descriptive statistics (such as means, standard deviations, frequencies, ranges, percentiles) (5)
- Inferential statistics (such as t-tests, ANOVAs, regression analysis, statistical process control, reliability, validity) (5)
- Vital statistics (5)
- Epidemiology (4)
- Data reporting and presentation techniques (5)
- Computerized statistical packages (5)
- Research design/methods (such as quantitative, qualitative, evaluative, outcomes) (5)
- Knowledge-based research techniques (such as Medline, CMS, libraries, web sites)(5)
- National guidelines regarding human subjects' research (4)
- Institutional review board process (5)
- Research protocol data management (4)

### **Quality Management and Performance Improvement**

- Quality assessment and management tools (such as benchmarking, ORYX, SQC) (5)
- Utilization and resource management (4)
- Risk Management (4)
- Disease management process (such as case management, critical paths) (4)
- Outcomes measurement (such as patient, customer satisfaction, disease specific) (5)

### **Health Services Organization and Delivery**

- Organization of healthcare systems (5)
- Components and operation of healthcare organizations including e-health delivery (5)
- Accreditation standards (such as JCAHO, AOA, NCQA, CARF, CHAP, URAC) (5)
- Regulatory and licensure requirements (such as COP, state health departments) (5)

### **Healthcare Privacy, Confidentiality, Legal and Ethical Issues**

- Legislative and legal system (4)
- Privacy, confidentiality, security principles, policies and procedures (5)
- Health information laws, regulations, and standards (such as HIPAA, e-health, JCAHO, state laws) (5)
- Elements of compliance programs (5)
- Professional and practice related ethical issues (5)

### **Information Technology & Systems**

- Computer concepts (hardware components, systems architectures, operating systems and languages, and software packages and tools) (4)
- Communications technologies (networks—LANS, WANS, VPNs; data interchange standards—NIST, HL-7) (4)
- Internet technologies (Intranet, web-based systems, standards – SGML, XML) (4)
- Data, information and file structures (data administration, data definitions, data dictionary, data modeling, data structures, data warehousing, database management systems) (5)
- Data storage and retrieval (storage media, query tools/applications, data mining, report design, search engines) (5)
- Data security (protection methods—physical, technical, managerial, risk assessment, audit and control program, contingency planning, data recovery, Internet, web-based, and e-Health security) (5)

### **Applied Health Informatics**

- Leading development of health information resources and systems (4)
- Brokering of information services (5)
- Clinical, business and specialty systems applications (administrative, clinical decision support systems, electronic health record and computer-based health record systems, nursing, ancillary service systems, patient numbering systems at master and enterprise levels) (5)
- Systems development (planning, analysis and design, customization, selection/procurement, implementation, integration, support, testing and evaluation, auditing and monitoring) (5)
- Human factors and user interface design (4)
- Systems Life Cycle (systems analysis, design, implementation, evaluation, and maintenance) (5)

### **Organization and Management**

- Principles of management (5)
- Negotiation techniques (4)
- Communication and interpersonal skills (5)
- Team/consensus building (5)
- Professional development for self and staff (4)
- Problem solving and decision making processes (5)

**Human Resources Management**

- Employment laws (4)
- Principles of human resources management (recruitment, supervision, retention, counseling, disciplinary action) (5)
- Workforce education and training (4)
- Performance standards (5)

**Financial and Resource Management**

- Healthcare finance (payer mix, bond rating, investment, capitalization) (3)
- Accounting principles (4)
- Budget process (capital and operating) (5)
- Cost/benefit analysis (5)

**Strategic Planning and Organizational Development**

- Strategic leadership, management and planning (4)
- Organizational behavior (4)
- Business building (entrepreneurialism – building your own business; intrapreneurialism – championing best practices, processes, services within your organization) (3)
- Change management (4)
- Organizational assessment and benchmarking (4)

**Project and Operations Management**

- Process reengineering and work redesign (4)
- Project management (5)

Competency Levels	
1 = Awareness	Introductory recall and recognition
2 = Literacy	Knowledge of framework and content
3 = Concept	Comprehension, translation, extrapolation and interpretation of meaning
4 = Detailed Understanding	Appropriate application of knowledge in a structured or controlled context
5 = Skilled Use	Application using analysis, synthesis, and evaluation in new situations