

**CASE STUDIES IN HEALTH INFORMATICS**  
Curriculum Content Frameworks

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# Curriculum Content Frameworks

## CASE STUDIES IN HEALTH INFORMATICS

Grade Levels: 11-12

Prerequisites: Computer Business Applications  
Introduction to Health Informatics  
Medical Terminology  
Medical Office Procedures

Course Description: This course will help guide students in “bridging the gap” between content knowledge and on-the-job performance in actual Health Information Management practice. Students will apply critical thinking skills to real events and situations that occur in the workplace.

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# Unit 1: Careers in Health Informatics

## Hours: 8

Terminology: Admitting officer/clerk, Applied researcher, Associate's degree, Bachelor's degree, Certification, Community services specialist, Data analyst, Epidemiologist, Ethicist, Healthcare administrator, Health educator, Health information (medical records) administrator, Health information coder, Health information services, Health information technician, Licensure, Medical assistant, Medical biller/patient financial services, Medical illustrator, Medical interpreter/translator, Medical librarian, Medical librarian/cybrarian, Medical information technologist, Medical transcriptionist, Medical translator, Patient advocate, Public health educator, Registration, Reimbursement specialist, Risk management, Social worker, Unit coordinator, Utilization manager

- 1.1 Define terminology related to careers in Health Informatics
  - 1.1.1 Use terms appropriately in context
  
- 1.2 List careers in Health Informatics
  - 1.2.1 Explore careers and case studies in Health Informatics, including duties, requirements, and opportunities
  - 1.2.2 Research Health Informatics careers through databases, Internet, publications, personal interviews, and job shadowing
  - 1.2.3 Read and analyze a career-related case study
  - 1.2.4 Write personal reflection of career-related case study
  
- 1.3 Outline a specific (chosen) Health Informatics career
  - 1.3.1 Using presentation software, present specific career findings
  - 1.3.2 Write personal reflection of career case study

## **Unit 2: Employment Strategies**

### **Hours: 8**

Terminology: Competence, Criticism, Dependability, Leadership, Teamwork

- 2.1 Define terminology related to employment strategies
  - 2.1.1 Use terms appropriately in context
- 2.2 List employee traits for workplace success
  - 2.2.1 Discuss employee traits for workplace success
  - 2.2.2 Role play appropriate behavior in situations for workplace success
- 2.3 Analyze individual personal skills related to employment opportunities
  - 2.3.1 Write personal reflection of case study on employment strategies

## **Unit 3: Professionalism**

### **Hours: 8**

Terminology: Confidentiality, Discretion, Empathy, Ethics, Guidelines, Negligence, Patients' Bill of Rights, Privileged communication, Professionalism, Standards, Tact

- 3.1 Define terminology related to professionalism
  - 3.1.1 Use terms appropriately in context
- 3.2 Describe various methods of solving professional and ethical issues
  - 3.2.1 Discuss appropriate methods to solve professional and ethical issues
  - 3.2.2 Role play case studies involving professional and ethical issues
- 3.3 Distinguish between proper and improper handling of situations in the medical workplace
  - 3.3.1 Determine the importance of handling situations appropriately
  - 3.3.2 Write a personal reflection of case study on professionalism

## **Unit 4: Ethical and Legal Responsibility**

### **Hours: 12**

Terminology: Abuse, Advance directive, Confidentiality, Defamation, Durable power of attorney, Ethics, Health Insurance Portability and Accountability Act (HIPAA), Incident report, Informed consent, Invasion of privacy, Legal, Libel, Living will, Malpractice, Negligence, Patient's Bill of Rights, Patient's rights, Patient Self-Determination Act (PSDA), Privileged communication, Slander, Tort

- 4.1 Define terminology related to ethical and legal responsibilities
  - 4.1.1 Use terms appropriately in context
- 4.2 Describe ethical and legal boundaries in healthcare delivery
  - 4.2.1 Differentiate between ethical and legal issues impacting healthcare
  - 4.2.2 Analyze ethical and legal aspects of confidentiality
  - 4.2.3 Prepare a debate on ethical and unethical treatment of patients/clients
- 4.3 State legal regulations that apply to healthcare records
  - 4.3.1 Discuss legal regulations as related to healthcare records
  - 4.3.2 Read and discuss case study involving patient's rights
- 4.4 Identify basic rules of ethics for healthcare personnel
  - 4.4.1 Simulate a situation that depicts ethical and unethical behavior of healthcare personnel
  - 4.4.2 Write personal reflection of ethical and legal responsibility experiences

## **Unit 5: Communication**

### **Hours: 12**

Terminology: Barriers, Close-ended questions, Cultural diversity, Discretion, Feedback, Leading questions, Listening, Message, Nonverbal communication, Open-ended questions, Patience, Probing questions, Receiver, Sender, Sympathy, Transcribe

- 5.1 Define terminology related to safety communication in healthcare
  - 5.1.1 Use terms appropriately in context
- 5.2 List types of communication utilized in the healthcare setting (i.e., oral, written, nonverbal, electronic)
  - 5.2.1 Discuss the importance of effective communication in healthcare
  - 5.2.2 Determine characteristics of successful and unsuccessful communication
  - 5.2.3 Role play situations in each type of communication in the healthcare setting
  - 5.2.4 Write a personal reflection on situations in healthcare communication
- 5.3 List 3 common communication barriers- physical, psychological, and cultural
  - 5.3.1 Discuss case study involving communication barriers

## **Unit 6: Health Data Management**

### **Hours: 12**

Terminology: Cultural diversity, Handicapped

- 6.1 Define terminology related to documentation of medical records
  - 6.1.1 Use terms appropriately in context
- 6.2 Identify basic health record forms and required content
  - 6.2.1 Practice completing various health data forms
  - 6.2.2 Prepare instructions on how to complete and understand forms
  - 6.2.3 Explore procedures for handicapped and culturally diverse populations
- 6.3 List procedures for storage, maintenance, and retrieval of health information
  - 6.3.1 Research proper maintenance, distribution, and disposal of records (HIPAA)
  - 6.3.2 Accurately file records using alphabetical and numerical systems for easy retrieval
- 6.4 Describe a problematic situation involving health record forms
  - 6.4.1 Read and analyze a case study, involving health record forms
  - 6.4.2 Write personal reflection on health record forms-procedures and situations

## **Glossary**

### **Unit 1: Careers in Health Informatics**

1. Admitting officer/clerk – person who coordinates activities related to admission of patients in a hospital or other healthcare facility
2. Applied researcher – person who accesses and uses some part of the research communities' accumulated theories, knowledge, methods, and techniques, for a specific purpose
3. Associate's degree – degree awarded by a vocational-technical school or community college after successful completion of a two-year course of study or its equivalent
4. Bachelor's degree – degree awarded by a college or university after a person has completed a four-year course of study or its equivalent
5. Certification – the issuing of a statement or certificate by a professional organization to a person who has met the requirements of education and/or experience and who meets the standards set by the organization
6. Community services specialist – person who is responsible for providing clerical, technical, and specialized assistance to personnel in the preservation of the health, safety, and welfare of the community and the enforcement of municipal codes and regulations
7. Data analyst – person who is responsible for gathering, modeling, and transforming data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making
8. Epidemiologist – person who studies the history, cause, and spread of an infectious disease
9. Ethicist – person who studies moral values and judgments as they apply to medicine
10. Health care administrator – person who plans, coordinates, and supervises the functions of health care facilities and the staff that work there
11. Health educator – person who is employed by a hospital, public health facility and other medical care setting to help educate patients about their health
12. Health information (medical records) administrator – person who plans, coordinates, and supervises records system; collects, maintains, and reviews medical records
13. Health information coder – person who assigns a code to each diagnosis and procedure documented in the patient's record
14. Health information services – services related to health information, such as communication, completion of forms, coding, billing, data entry
15. Health information technician – person who is responsible for assembling patients' health information, making sure that patients' initial medical charts are complete, that all forms are completed and properly identified and authenticated, and that all necessary information is in the computer

16. Licensure – process by which a government agency authorizes individuals to work in a given occupation
17. Medical assistant – person who performs routine clinical, administrative, and laboratory tasks in medical clinics
18. Medical biller/patient financial services – person who accurately enters charges, efficiently processes claims, processes responses from health insurance companies, timely billing and collection procedures, and collection methods
19. Medical illustrator – person who provides a wide range of clinical photography and graphic services to healthcare providers
20. Medical interpreter – person who translates one language to another in a healthcare setting
21. Medical librarian – trained information specialist who provides, organizes, and retrieves a variety of resources for healthcare providers
22. Medical librarian/cybrarian – librarian who uses computers and the Internet for their work; any person who works doing medical online research and information retrieval, especially one who answers reference questions online
23. Medical information technologist – person who indexes, records, and stores medical records and reports of patients admitted to hospitals and other health care agencies, and who also prepares reports of births, deaths, transfers, and discharges of patients
24. Medical transcriptionist – individual who has obtained the necessary education to translate medical dictation into meaningful, legible communication
25. Medical translator – a person who specializes in translating written documents, such as patient records or medical legal documents
26. Patient advocate – person who speaks on behalf of patients in order to protect their rights and helps them obtain needed information and services
27. Public health educator – person in charge of planning and implementing a health education program for a local health department or assisting in directing a program for a large geographical area of the state
28. Registration – process whereby a regulatory body in a given health care area administers examinations and/or maintains a list of qualified personnel
29. Reimbursement specialist – person who facilitates the claims paying process from the time a service is rendered by a health care provider until the balance is paid
30. Risk management – the technique or profession of assessing, minimizing, and preventing accidental loss to a business, as through the use of insurance, safety measures, etc.
31. Social worker – person who organizes work directed toward the betterment of social conditions in the community, as by seeking to improve the condition of the poor, to promote the welfare of children, etc.

32. Unit coordinator – person who helps maintain a health care facility's service and performance
33. Utilization manager – person who monitors department/division adherence to policy and procedure and integrity of the quality management program; coordinates data collection and reporting mechanisms; facilitates problem solving activities

## **Unit 2: Employment Strategies**

1. Competence – possession of required skill, knowledge, qualification, or capacity
2. Criticism – the act or art of analyzing and evaluating or judging the quality of one's job performance
3. Dependability – the quality of being reliable or trustworthy; doing what one says he/she will do
4. Leadership – ability to lead, guide, and direct others
5. Teamwork – cooperative effort by the members of a group to achieve a common goal

## 6. Unit 3: Professionalism

1. Confidentiality – the act or process of keeping restricted information private
2. Discretion – the quality of being discreet, especially with reference to one's own actions or speech
3. Empathy – the recognition and understanding of the feelings, thoughts, or attitudes of another person
4. Ethics – a system of moral standards or values
5. Guidelines – a statement or other indication of policy or procedure by which to determine a course of action
6. Negligence – failure to give care that is normally expected, resulting in injury to another person
7. Patients' Bill of Rights – a statement of the rights which patients are entitled to as recipients of medical care. Typically, a statement articulates the positive rights which doctors and hospitals ought to provide patients, thereby providing information, offering fair treatment, and granting them autonomy over medical decisions
8. Privileged Communication – all personal information given to healthcare personnel by a patient; must be kept confidential
9. Professionalism – a set of characteristics and behaviors that enables one to do the best job possible to provide and maintain high quality service to patients and employers
10. Standards – acceptable performance levels that have been developed by an established authority
11. Tact – a careful consideration of the feelings and values of others

## Unit 4: Ethical and Legal Responsibility

1. Abuse – improper or excessive use or treatment
2. Advance directive – a legal document designed to indicate a person's wishes regarding care in case of a terminal illness or during the dying process
3. Confidentiality – the act or process of keeping restricted information private
4. Defamation – slander or libel; a false statement that causes ridicule or damage to a reputation
5. Durable power of attorney – a legal document conveying authority to an individual to carry out legal affairs on another person's behalf
6. Ethics – a system of moral standards or values
7. Health Insurance Portability and Accountability Act (HIPAA) – set of federal regulations adopted to protect the confidentiality of patient information and the ability to retain health insurance coverage
8. Incident report – documentation for any unusual problem, incident or other situation
9. Informed consent – permission granted voluntarily by a person who is of sound mind and aware of all factors involved
10. Invasion of privacy – revealing personal information about an individual without his or her consent
11. Legal – authorized or based on law
12. Libel – false written statement that causes a person ridicule or contempt or causes damage to the person's reputation
13. Living will – a legal document stating a person's desires on what measures should or should not be taken to prolong life when his or her condition is terminal
14. Malpractice – providing improper or unprofessional treatment or care that results in injury to another person
15. Negligence – failure to give care that is normally expected, resulting in injury to another person
16. Patients' Bill of Rights – a statement of the rights to which patients are entitled as recipients of medical care. Typically, a statement articulates the positive rights which doctors and hospitals ought to provide patients, thereby providing information, offering fair treatment, and granting them autonomy over medical decisions
17. Patient's rights – factors of care that all patients can expect to receive
18. Patient Self-Determination Act (PSDA) – an act that requires medical facilities and health agencies to provide information on advance directives at the time of admission

19. Privileged communication – all personal information given to healthcare personnel by a patient; must be kept confidential
20. Slander – spoken comment that causes a person ridicule or contempt or damages the person's reputation
21. Tort – a wrongful or illegal act of civil law not involving a contract

## Unit 5: Communication

1. Barriers – limits or boundaries of any kind
2. Close-ended questions – those which can be answered finitely by either “yes” or “no”
3. Cultural diversity – integrated existence of ethnic groups based on their values, beliefs, and behavior patterns (social, educational, economic, religious, and artistic values)
4. Discretion – the quality of being discreet, especially with reference to one’s own actions of speech
5. Feedback – the response of a receiver to a message
6. Leading questions – a question which subtly prompts the respondent to answer in a particular way
7. Listening – a mental process as well as the physical aspects of hearing or the process of hearing and focusing attention to understand and remember an oral message
8. Message – a set of symbols selected to represent a thought or idea
9. Nonverbal communication – communication that does not use words; including various movements of the total body such as facial expressions, gestures of hands and arms, and posture
10. Open-ended questions – questions designed to encourage a full, meaningful answer using the subject's own knowledge and/or feelings
11. Patience – even-tempered care; endurance
12. Probing questions – intended to help the presenter think more deeply about the issue at hand
13. Receiver – a person or thing to whom a message is sent; the audience
14. Sender – person or thing that originates an idea or initiates the communication process
15. Sympathy – harmony of or agreement in feeling, as between persons or on the part of one person with respect to another
16. Transcribe – to copy, write again in another place, write over, transfer

## **Unit 6: Health Data Management**

1. Cultural diversity – integrated existence of ethnic groups based on their values, beliefs, and behavior patterns (social, educational, economic, religious, and artistic values)
2. Handicapped – a physical or mental condition that negatively impacts a person's quality of life