

MBA-II / SEM-IV / (2024-25)

COMPREHENSIVE CONCURRENT EVALUATION

Faculty Name: Prof. Ujjval More

Subject: Healthcare Analytics

Sub Code: 410 SE-IL-BA-14

Sr. No.	Parameter / Component	Marks	Date of Exam/Submission
1	Written Home Assignment	50	03/03/2025
2	Case Study	50	08/03/2025

Component 1. Written Home Assignment

Instructions:

1. The last date of Submission is 08/03/2025.
 2. Written Home Assignment should be hand written and in your own words; copied Written Home Assignment and case study from peers onother open sources will not be considered for assessment.
 3. The content should cover all the points & justify the marks for Written Home Assignment and case study.
 4. Incomplete Written Home Assignment will not be accepted.
 5. Student name, specialization, Written Home Assignment questions must be clearly mentioned.
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Component 1. : Written Home Assignment:

(50 Marks)

- 1) Explain Biomedical Image Analysis and Biomedical Signal Analysis.
- 2) Discuss Applications and Practical Systems for Healthcare.
- 3) What is the History of EHR? Explain Components of EHR.
- 4) List Benefits of EHR, Barriers to Adopting HER and Challenges of Using EHR Data.
- 5) Discuss Social Media Analysis for Detection and Tracking of Infectious Disease Outbreaks.
- 6) Explain Analysis of Data from Online Doctor and Patient Communities.
- 7) Discuss Introduction to Visual Analytics and Medical Data Visualization.
- 8) Discuss Other Clinical Methods and Visual Analytics for Patients.
- 9) Define Types of Healthcare Fraud and how to Identifying Healthcare Fraud from Data.
- 10) How to Identify Fraudulent Claims. - Bayesian Approach & Non-Bayesian Approaches.

Component 2. Case Study:

(50 Marks)

Coding Auditing RAC - Health System

Client Details

For a major health system with multiple hospitals located across the state, Vee Technologies provides various services, including coding, auditing, and RAC (Recovery Audit Contractor) review. The recovery audit program is an audit program to identify improper Medicare payments, including overpayments and underpayments as a result of coding issues. All the hospitals in this health system send the audit recommendations they receive from RAC to Vee Technologies coders to validate the audit findings.

Challenges

These hospitals were struggling to keep the DNFB down and were facing a shortage of in-house resources. Workforce constraints at the hospitals were also leading to higher costs. Two of the hospitals in this health system had coding quality issues for in-house coders and requested Vee Technologies auditors to perform coding audits for both inpatient and outpatient facilities. The hospital group was also receiving an increased number of first appeal coding denials from RAC.

Vee Technologies Process Excellence

We were able to staff coders from our university-based coding school, most of whom are certified from AHIMA or AAPC, who are cross trained to work on multiple specialities, including inpatient and outpatient chart types. Our quality team reviewed the charts coded by the client coders and gave

Feedback by sharing our audit recommendations. These recommendations enabled the client to improve coder accuracy and quality. The Vee Technologies team also reviewed assigned medical records and was successful in identifying documentation and clinical indicators which supported the coding. This helped the hospitals to request second-level appeals and discuss the claim with the Recovery Audit Contractor.