

# ■ ACHA DETAILED CONTENT OUTLINE

## I. FORCES THAT DRIVE THE BUSINESS OF HEALTHCARE

*Demonstrate an understanding of the following topics as factors influencing the development of healthcare projects.*

### Total 15 questions

- A. Economics
  - 1. Funding sources
  - 2. Market forces:
    - a. demographics
    - b. competition
  - 3. Payors / Payor mix
- B. Regulation / Reimbursement
  - 1. Affordable Care Act
  - 2. Centers for Medicare and Medicaid Services
  - 3. Other government agencies
  - 4. The Joint Commission
- C. Healthcare Models / Technology
  - 1. Information and diagnostic technology
  - 2. Care models
  - 3. Staffing type and availability
  - 4. Population health

## II. PRE-DESIGN

### Total 35 questions

#### A. Programming

*Context Awareness and Analysis*

- 1. Confirm and help validate strategic and operational plans
- 2. Establish clear goals and objectives
- 3. Determine constraints
  - a. regulatory
  - b. budgetary
  - c. schedule and/or phasing
- 4. Identify the review and approval process and participants
- 5. Develop scenario plans
- 6. Develop an understanding of an organization's current healthcare procedures and processes

*Workload Analysis*

- 7. Develop an understanding of staffing patterns in different healthcare environments
- 8. Identify the variables that affect room and equipment utilization
- 9. Recognize industry norms and specific factors influencing utilization
- 10. Compare existing conditions and capacity to projected needs (e.g., functionality, adequacy of space, adjacencies)
- 11. Compare existing conditions to norms and best practices (benchmarking)

*Facilities Programming*

- 12. Identify the factors that influence key room quantities
- 13. Develop list of spaces required to support key rooms

- 14. Identify differences between net-to-departmental grossing factors and departmental-to-building grossing factors by facility type
- 15. Develop functional description
- 16. Establish diagrammatic functional relationships
- 17. Establish medical technology systems and strategies
- 18. Establish major equipment relationships
- 19. Identify viable building support and infrastructure systems
- 20. Estimate building support and infrastructure space requirements
- 21. Identify project cost components

#### B. Site and Facilities Master Planning

- 1. Evaluate access and accessibility of site (e.g., parking, entrances, etc.)
- 2. Establish internal and external circulation patterns
- 3. Establish functional adjacencies and synergies
- 4. Determine implementation/phasing strategy
- 5. Match building occupancy type with functional needs
- 6. Develop and assess alternative solutions relative to current and future objectives
- 7. Establish infrastructure strategies
- 8. Collect or create documentation of existing site and building conditions
- 9. Assess existing conditions for obsolescence/current code compliance
- 10. Establish interdepartmental relationships and vertical/horizontal adjacencies
  - stacking diagrams
  - block planning diagrams
- 11. Plan circulation, structural, and infrastructure concepts
- 12. Plan building flexibility and expansion options

## III. DESIGN

### Total 35 questions

#### A. Facilities Design

- 1. Confirm relevance of the program and planning documents to current factors affecting healthcare delivery
- 2. Conduct building and health facilities code research
- 3. Synthesize and integrate the design and planning of
  - functional arrangements
  - building massing and envelope
  - site and context (e.g., access points, parking, topography)
  - medical equipment and technologies
- 4. Research/study major building materials and systems options
- 5. Coordinate architectural design with specialized building systems design

6. Assess and prioritize design and planning options
  7. Provide conceptual estimates at design development phase
  8. Advise client on strategies to avoid facility obsolescence
- B. Departmental Design
1. Align design with patient and staff
    - a. flow
    - b. experience
    - c. safety
  2. Confirm intradepartmental space requirements and adjacencies
  3. Confirm departmental constraints and opportunities
  4. Design intradepartmental circulation, structure, and infrastructure concepts
  5. Design flexibility and expansion options
  6. Prepare departmental plans to include
    - process improvement strategies
    - the size and arrangement of all department spaces
    - horizontal/vertical intradepartmental circulation
    - horizontal/vertical intradepartmental materials movement
  7. Coordinate architectural design with building systems design
  8. Assess and prioritize design and planning options
- C. Detailed Design
1. Develop room data to align with
    - a. patient and staff safety
    - b. patient and staff experience
    - c. patient and staff privacy
    - d. environment (e.g., sound, lighting)
    - e. finish selections (durable, sustainable)
    - f. technical and operational requirements
    - g. maintenance requirements
  2. Coordinate and evaluate the use of mock-ups and simulations for testing key patient care and treatment spaces
  3. Coordinate equipment layouts, requirements, and manufacturer specifications

#### IV. DELIVERY & IMPLEMENTATION

##### Total 15 questions

- A. Contracts
1. Interpret language specific to healthcare facility requirements of contracts
- B. Construction documents
1. Prepare code analysis to verify compliance with local, state, and federal requirements
  2. Prepare Life Safety plans and narrative
  3. Review project with appropriate Authorities Having Jurisdiction
  4. Prepare documents defining required phasing and associated healthcare implications
    - a. for infection control
    - b. constructability / interim life safety
    - c. operational disruption
    - d. transition planning / operational startup
  5. Ascertain specific owner input on unique facility requirements for construction and selection of medical equipment and technologies
  6. Assist owner with variances and waivers required by Authorities Having Jurisdiction
- C. Review owner-provided fixed medical equipment and technologies submittals for coordination with contract documents
- D. Assist the owner with final processes for obtaining approval, licensing, or certificate of occupancy
- E. Evaluate results of post-occupancy evaluation and research findings

##### TOTALS 100 questions

Every item will be linked to a specific healthcare setting:

- General
- Acute Care
- Post-Acute Care
- Outpatient Care
- Behavioral and Mental Health Care