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FACHE®
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Becoming Board Certified in Healthcare Management and a Fellow of the American College of Healthcare Executives

Knowledge Area Covered in the Board of Governor's Exam:

Finance

ACHE - SouthEastTexasChapter
An Independent Chapter of the American College of Healthcare Executives

Finance

Introduction

Acquisition, management, creation and analysis of money and investments.

Includes:

▪Oversight ▪Planning ▪Development ▪Analysis ▪Assessment

of financial activities and processes for an organization's capital, budget, accounting, and related reporting systems.

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Specific Knowledge Areas

Finance (24 questions 12%)

- Basic accounting principles (e.g., accounts receivable, cash flow)
- Financial management and financial analysis principles (e.g., balance sheets, income and cash flow statements, ratio analysis)
- Operating budget principles (e.g., fixed vs. flexible, zero-based)
- Capital budgeting principles
- Forms of business organizations & classifications
- Reimbursement techniques
- Fundamental productivity measures (e.g., hours per patient day, cost per patient day, units of service per man hour, PMPM)

Basic Types of Accounting

- Financial accounting attempts to provide external users with information concerning the status of the firm and the results of its operation
- Managerial accounting attempts to provide information necessary for internal decision making to those responsible for managing the firm.

Financial Accounting: Investor/Lender

- Interested in estimating the company's future earnings stream.
- How well has the company performed in the past?
- What are its future expectations?
- How much risk is inherent in the firm's existing capital structure?
- How successfully does the firm compete in its industry?
- Can the firm keep it competitive position?

Managerial Accounting: Organization Management

- Cost Accounting is important aspect for decision making and identifying cost of services provided.
- Developing operational strategies and identifying necessary corrections.
- How well has the firm performed and why?
- What operating areas have contributed to success and which have not?
- What changes should be implemented in order to improve future performance?

Methods of Accounting

Accrual Method of Accounting:

- In computing net income, revenue is recorded as it is earned and the amount is measurable, not necessarily as cash is received.
- Expenses are recorded when they are incurred or used rather than when cash is disbursed.

Cash Method of Accounting:

- Income is recorded when cash is received
- Expenses are recorded when payment is made

GAAP

- Generally Accepted Accounting Principles
  - Rules to which American accountants adhere when preparing financial statements. GAAP standards are designed to ensure that financial data is fairly reported by using the same standards of reporting for all organizations. These standards provide for comparison of financial statements across companies and industries.

GAAP continued….

- Concerned with measurement and disclosure of economic activity and determine how the accounting process is to be applied.
- GAAP standards are set by the Financial Accounting Standards Board (FASB). Derive their authority from their general acceptance and use and may change over time.

Expanded Accounting Equation

Assets

=

Liabilities + Owners' Equity + Revenue - Expenses

Financial Statements

There are four main types of financial statements:

- Balance Sheet
- Income Statement
- Statement of Cash Flows
- Statement of Owner’s/Shareholder’s Equity

Balance Sheet

- Report of what the company owns, its financial obligations, and claims by owners (owners'/shareholders' equity) as of a *point in time*.

Elements of the Balance Sheet

- Assets
- Liabilities
- Equity

  Includes:

  - Investment by owners
  - Retained Earnings of Company
  - Reduced by Distribution to owners

Assets

- Things of financial value that an entity owns or controls
- Obtained by the entity as a result of past transactions or events
- Expectation of future economic benefit to be generated for the entity

Asset Classifications

- Assets are grouped into general classifications according to their physical attributes, frequency of use and useful life.
  - Current Assets
  - Fixed Assets
  - Other Assets
  - Long-term Assets

Current Assets

- Includes cash and other assets, which are expected to be converted in to cash, sold, or used in operations or production during the current 12 month operating cycle.
  - Cash
  - Accounts Receivable
  - Inventories
  - Prepaid Expenses

Fixed Assets & Intangible Assets

- Fixed assets are long-term tangible assets that have physical substance such as buildings and equipment.
- Intangible assets are assets without physical substance, such as patents and copyrights.

Fixed Assets

- Property, plant and equipment from which the business expects to receive benefits over a number of future accounting periods
  - Building
  - Land
  - Equipment

Other/Intangible Assets

- Includes those assets not appropriately classified in either the current or the fixed asset categories.
  - Patents
  - Copyrights
  - Goodwill

Long-term Assets

- Assets that the entity expects to utilize or convert to cash beyond the current 12 month operating cycle
  - Notes Receivable
  - Long-term Marketable Securities

Liabilities

- The claims of creditors against the assets of the business. These claims have priority over those of the owners in the event of the liquidation of a business.
- Liabilities are usually classified as current or long-term.

Current Liabilities

- Short-term obligations that will be due to creditors within the current 12 month operating cycle of the entity and are paid from the revenue generated from operations.
- Examples
  - Accounts Payable
  - Unearned Revenue

Long-term Liabilities

- The financial obligations of the entity with due dates beyond one year
- Examples
    - Notes Payable
    - Bonds Payable

Owner's/Shareholder's Equity

- Net or residual interest of the assets of an entity that remain after deducting its liabilities.

- Represents the claims of owners against the net assets of a firm.
- Created either by investment by owners or by allowing profits earned by the entity to remain within the business.

Elements of Equity Section

- Contributions of owners/shareholders

  + Current Net Income/Loss

  + Retained Earnings: Cumulative result of prior periods net income or loss from operations

  - Reduced for distributions to owners/shareholders

Balance Sheet

Assets	Liabilities
Current Assets:	**Current Liabilities:**
Cash	Accounts Payable
Accounts Receivable	Accrued/Unearned revenue
Marketable Securities	
Pre-paid Assets	
Fixed Assets:	**Long-Term Liabilities:**
Land	Notes Payable
Buildings	Bonds Payable
Equipment	**Total Liabilities**
Less: Accumulated Depreciation	
Intangible Assets:	**Owner's Equity:** (Net Worth of the organization)
Patents	Owner's Investment
Copyrights	Additional Paid in Capital
Goodwill	Retained Earnings
Long-term Assets:	Less: Dividends/Distributions
Notes Payable	**Total Owner's Equity**
Total Assets =	**Total Liabilities & Owner's Equity**

Balance Sheet Questions Answered

- What is the company’s overall financial strength?
- How liquid is the company?
- Will the company be able to meet its financial goals?
- What proportion of the company’s assets have been contributed by creditors? By investors?
- How does the company’s financial position compare with that of others in the industry?

Income Statement

- Report of a company's profitability *over a specific period of time*
- Summary of revenues, expenses, gains and losses
  - Revenue minus expenses = operating income
  - Operating income - losses + gains = net income
- Measurement of management performance in utilizing assets to produce profits
- Useful for evaluating future performance for making investment and lending decisions

Revenue & Expense

- Revenue: Income derived from the normal business activities of an organization from delivering or producing goods or rendering services during a period of time.

- Expense: Costs incurred in the normal business activities of an organization from delivering or producing goods, rendering services or carrying out other activities.

Net Income/(Loss)

For any accounting period:

- Revenues > Expenses = Net Income
- Expenses > Revenue = Net Loss

Income Statement

Operating Revenue:

- Gross Charges
- *Less:* Contract Discounts/Allowances

Net Revenue

Other Operating Revenue – Grants, Auxiliary Revenue

Total Operating Revenue

Operating Expenses:

- Personnel Expense
- Operating Supplies – Medical, Pharmacy, Office, etc.
- Purchased Services – Insurance, Consulting, etc.
- Facilities – Rent, Maintenance, Utilities
- Depreciation & Amortization

Total Operating Expenses

Gross Operating Margin – Operating Revenue *less* Operating Expense

Non-Operating Income & Expense

- Interest Income/Expense
- Gain/Loss on sale of assets
- Gain/Loss on Investments

Net Income = Gross Operating Margin + Non-Operating Gain/Loss

Depreciation Expense

- Non-cash operating expense allocating the cost of a fixed-asset (except Land) ratably over the period of time that the asset will contribute to the operations of the organization (useful life).
- Four main depreciation methods:

  Straight-line, Double declining balance, Units of production, Sum of the years digits

Example: Truck purchased for $15,000 is expected to be used for 10 years. Using the straight-line method with no salvage value, $1,500 of depreciation expense will be recorded each year for 10 years.

Amortization Expense

- Similar to depreciation expense, a non-cash expense allocating the cost of an intangible asset ratably over the asset's useful life.
- Example: Amortization of a patent over the legal useful life of 17 years.

Income Statement Questions

- Did the company earn a profit this year, and if so, how does it compare with its profits from other years?
- What is the company's gross margin on sales, and is it large enough to cover other operating expenses?
- What are the various components of revenues and expenses and how do they compare with prior years?
- Did the firm generate enough revenues from operations to make current debt service payments?
- How profitable is the firm compared with others in its industry?

Statement of Cash Flows

- Converts accrual based Net Income to a cash basis
- Explains the sources and uses of cash between successive Balance Sheets
- Most important statement especially for start up businesses

Statement of Cash Flows

Beginning Cash Balance

Cash Flows from Operating Activities:

Net Income

\+ Depreciation/Amortization Expense

\+ Accrued Expenses

\+ Increase in Accounts Payable

\- Increase in Accounts Receivable

Net Cash Flow from Operations

Cash Flow from Investing Activities:

\- Purchases of Fixed Assets/Equipment

\+ Sale of Assets

Total Cash Flow from Investing Activities

Cash Flow from Financing Activities:

\- Retirement of long-term debt

\- Change in notes payable

\- Dividends or Distributions to Shareholders

\- Issue of additional equity (Sale of additional shares of stock)

Total Cash Flow from Financing Activities

Ending Cash Balance (ties to Balance Sheet)

Why a Statement of Cash Flows

- Net income increases may not be accompanied by an equivalent increase in cash.
- Investors, creditors and management are critically interested in the cash flows of a business
- Neither the income statement nor the balance sheet show cash provided by operations or the causes of changes

Objective of the Statement of Cash Flows

- Explains the changes in cash plus highly liquid securities
- Provides a summary of the investing and financing activities of a firm during a period of time
- Useful in appraising other factors such as the firm's financing policies, dividend policies, ability to expand and the ability to satisfy future debt requirements.

Questions Answered

- What are the sources of the firm's cash?
- What proportion was generated internally?
- What other financing and/or investing activities took place?
- Why was the firm profitable, although there was only a slight increase in cash?
- Changes in cash between Balance Sheets

Managerial Accounting: Cost Management

- Direct & Indirect Cost:
  - Direct costs are variable as they change with volume (i.e. Patient chargeable supplies, pharmaceuticals)
  - Indirect cost are fixed regardless of volume are often referred to as "corporate overhead" (i.e. rent/lease expense, departments providing administrative services)

Managerial Accounting: Cost Management

Important Concepts in Indirect Cost Allocations

- Cost Centers: Areas in an organization that do not directly contribute to profitability, but are necessary for successful operation.
- Profit Centers: Areas in an organization directly contributing to the profitability of the organization

Capital Budgeting

Evaluation process for potential long-term major fixed asset expenditures.

Types of capital expenditures:

- Land
- Land Improvements
- Buildings
- Fixed Equipment
- Major Moveable Equipment
- Major Repairs

Types of Capital Expenditure Budgets

- Replacement – examples
  - To replace equipment at the end of useful life.
  - To improve productivity.
  - To improve quality or because it is required by regulation.

- New Investment – examples
  - Expanded service lines
  - Improve safety conditions
  - Reduce operating expenses
  - Improve patient care

Capital Expenditure Budget Considerations

1. Significant investment required – impact on working capital
2. Capital structure of the organization and availability of funds for expansion
3. Current economic condition and how financing/lending is impacted
4. Are current earnings of the organization stable?
5. The priority of the project for the organization. Are there other projects with higher priority?
6. Potential return on the investment

Capital Budget Performance

$$\text{Long-term debt-to-net assets} = \frac{\text{Long Term Debt}}{\text{Net Assets}}$$

Measuring Organizational Performance

Ratio Analysis:

- Liquidity
- Operating
- Profitability
- Debt/Leverage
- Industry Specific

Terms & Acronyms for Ratios

Debt Service

- Cash required to make debt payments (principal & interest)

EBITDA

- Earnings before Interest, Taxes, Depreciation & Amortization

EBIT

- Earnings before Interest & Taxes

Terms & Acronyms Continued…

EBITDAC

- Earnings before Interest, Taxes, Depreciation, Amortization & Corona Virus

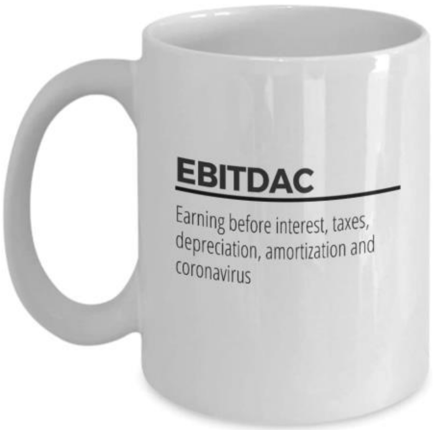

Photo courtesy of Amazon.com

Liquidity Ratios

Measure debt holder's ability to meet short-term debt obligations without accessing external capital.

- Working Capital
  - Current Assets – Current Liabilities
- Current Ratio
  - Current Assets/Current Liabilities
- Acid-test (quick) Ratio
  - (Cash+Cash equivalents+Receivables)/Current Liabilities

Liquidity Ratios continued….

- Days Cash on Hand
  - (Cash+Cash equivalents)/[(Operating Expenses-Non-cash expenses)/365)]
- Average Payment Period
  - Average Accounts Payable/(Total Credit Purchases/Days in the Period)
- Accounts Receivable Turnover
  - Net Revenue on Account/Average Accounts Receivable
- Average # of Days to Collect Receivables
  - 365/Accounts Receivable Turnover

Operating Ratios

Approaches to assessing management's effectiveness in generating revenue from investments in assets.

Asset Turnover Ratios:

- Fixed Asset Turnover
  - Revenue/Net Property, Plant & Equipment

- Total Asset Turnover
  - Revenue/Total Assets

Profitability Ratios

- Profitability Ratios

  Stockholders and potential investors purchase securities in an attempt to earn a return on their investment through dividends and increases in the market price of the stock.

  Profitability ratios measure the organization’s ability to generate earnings relative to its revenue, operating expenses, assets and equity.

Profitability Ratios Continued…

- Rate of return on total assets
  - [Net Income before interest & taxes]/
    [Average Total Assets during the year]

Rate of return on common stockholders' equity

[Net income (after Taxes and preferred dividends]/

[Average common stockholders' Equity]

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Profitability Ratios

- Return on Investment [ROI]
  - Net Income/Cost of the Investment
- Earnings per share on common stock
  - [Net Income – Preferred Dividends]/
  Average # of Common Shares Outstanding

Total Margin

Net Income/Total Revenue

Profitability Ratios

- Price-earning ratio
  - Market Price per share/Earning per share
- Operating Profit Margin
  - Operating Profit/Revenue
- Gross Profit
  - Gross Profit/Revenue

Leverage Ratios

Long-term creditors of a firm are particularly interested in the firm's ability to meet the Debt Service (principal + interest) requirements as they become due. Leverage ratios measure how much capital is from debt to analyze the organization's ability to meet its financial obligations.

Leverage Ratios

- Times Interest Earned
  - [Net Income before Interest Expense & Income Taxes]/Interest Expense
- Debt-to-equity ratio
  - Total Debt/Stockholder’s Equity
- Debt Ratio
  - Total Liabilities/Total Assets

Leverage Ratios continued…

- Debt Service Coverage
  - (Earnings before Interest, Taxes, Depreciation & Amortization {EBITDA})/ Principal+Interest Expense
- Equity Financing Ratio
  - Net Assets/Total Assets

Forms of Business Organization

- Sole Proprietorship
- Partnership (General)
- Partnership (Limited)
- C-Corporation
- S-Corporation
- Limited Liability Company
- Limited Liability Partnership

Business Organizations: Owner Liability

Organizations with unlimited owner liability:

- Sole Proprietorship
- Partnership (General)

Organizations with limited owner liability:

- Partnership (Limited)
- C-Corporation
- S-Corporation
- Limited Liability Company
- Limited Liability Partnership

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Business Organizations: Additional Considerations

Organizations limiting owner involvement:

- Partnership (Limited)

Organizations with partner restrictions:

- S-Corporation
  - Must be domestic corporation
  - Individuals, certain trusts & estates only
  - Limited to 100 shareholders
  - Certain corporations ineligible (i.e. insurance companies)
- Limited Liability Partnership
  - Not all professions can elect LLP form of ownership (i.e. accountants, lawyers, etc.)

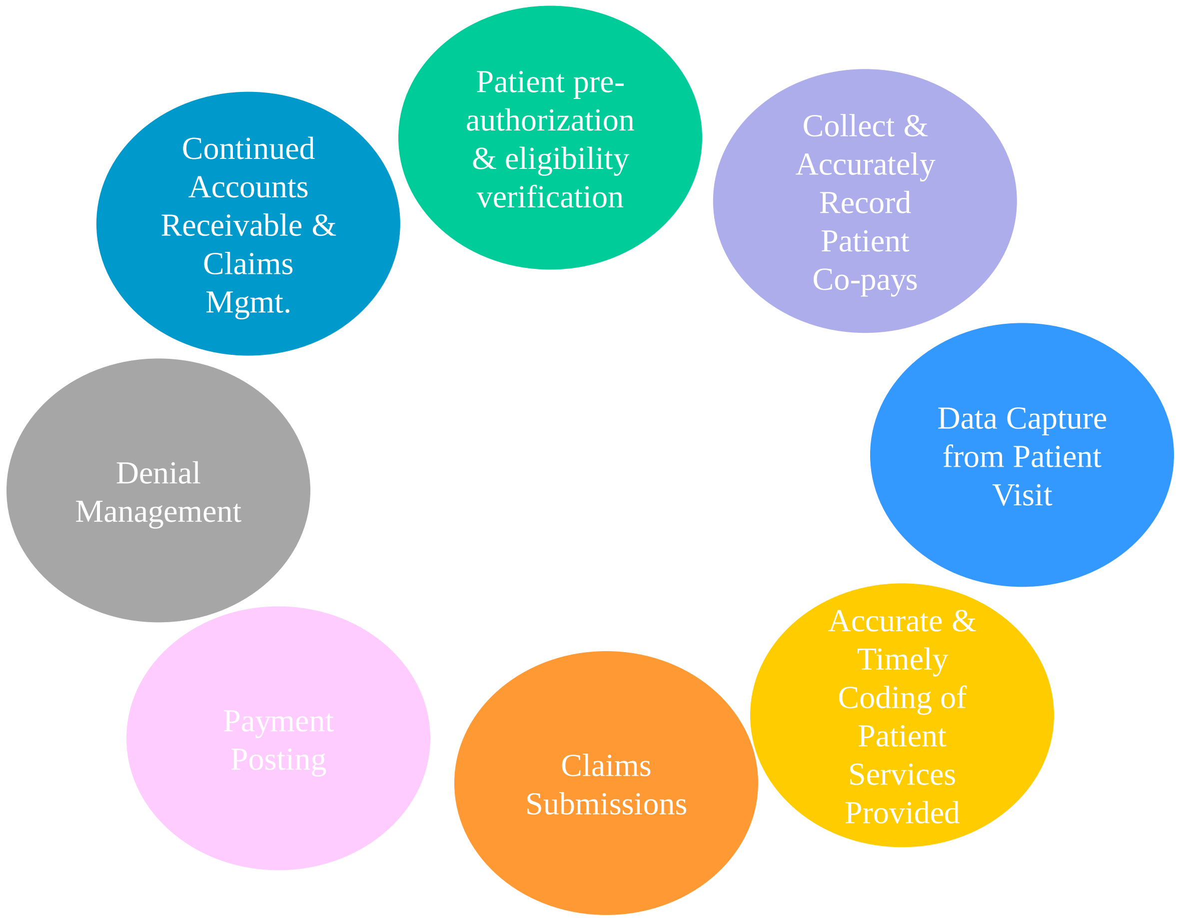
Tax Exempt & Non-Profit Organizations

- Tax Exempt refers to organization exempt from Federal Income Taxes IRS regulations. Application for tax exempt status is granted through application submission to the IRS
- Non-profit refers to the legal status of the organization under state law and is granted via application through the secretary of state.
- Both are formed to provide a service to the public

Hospital/Healthcare Specific Ratios

- Occupancy Rate
  - [(Total Inpatient Days/365)/Beds in Service] X 100
- Average Daily Census [ADC]
  - Total Inpatient Days/365
- Average Length of Stay [ALOS]
  - Total Inpatient Days/Total Discharges
- Administrative Expense Ratio
  - Non-health Service Expense/Total Operating Expense

Steps in the Revenue Cycle



Finance Review Question 1

- Statements of earnings, financial positions, changes in financial position and retained earnings are required to be submitted yearly by all:
  – Publicly owned healthcare organizations.
  – Privately owned healthcare organizations.
  – Government owned healthcare organizations.
  – Faith-based owned healthcare organizations.

Finance Review Question 2

Two types of financial information most valuable for managerial accounting are:

a) Cost data
b) Budget data
c) Earnings per share data
d) Federal & state tax data

Finance Review Question 3

The primary purpose of generally accepted accounting principles (GAA) in healthcare settings is to:

a) Provide regulators with increased access to high quality financial statements of organizations within their jurisdiction.
b) Ensure that financial information that is reported to outsiders is consistent across businesses and presented in a manner that facilitates interpretation and judgments.
c) Allow interested individuals a rapid means of collecting financial data about hospitals and managed care organizations.
d) Facilitate the training of accountants and other finance professionals in the fundamentals of hospital and health services accounting.

Finance Review Question 4

The Statement of Cash Flows is typically organized into three sections: Cash Flow from Operations; Cash Flow from Investing Activities; and Cash Flow from:

a) Bad Debt Recovery.
b) Regulatory Recapture.
c) Financing Activities.
d) Donations & Foundation Support

Finance Review Question 5

Which of the following is an Example of a capital expenditure?

a) Land that is purchased for resale.
b) Surgical equipment with a useful life of six months.
c) A building with a useful life of 20 years.
d) Medical supplies used for patient care.

Finance Review Question 6

What is the primary advantage of the corporate form of organization for a healthcare provider?

a) It exists by virtue of a statute providing for its formation.
b) It has powers granted to it by its charter.
c) Its continued existence is not affected by the death or disability of an owner.
d) It has limited liability.

Finance Review Question 7

Cost accounting is an important tool which enables the CFO to:

a) Meet Joint Commission fiscal requirements.
b) Ensure supplies are competitively purchased.
c) Determine the actual cost of providing patient care.
d) Improve revenue cycle returns

Finance Review Question 8

The real value of financial statements lies in the fact they can be used to help:

a) Predict the firm's future financial condition.
b) Compute total margin versus periodic gain.
c) Relate the industry average to net profit/loss over time.
d) Understand that a large portion of a hospitals net income may come from non-operating gains.

Finance Review Question 9

On a balance sheet, what does the difference between total current assets and total current liabilities indicate?

a) Cash on hand.
b) Net working capital.
c) Liquid assets.
d) Equity.

Finance Review Question 10

Budgets for new capital expenditures include requests for:

a) Infrastructure.
b) Wage adjustments.
c) New employee insurance plans.
d) New gain share agreement with staff physicians.

Finance Review Question 11

What in the revenue cycle process is a major impediment to prompt payment?

a) Payment receipt and posting.
b) Claims submission.
c) Poor financial counseling.
d) Claim denial.

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