Interpretation of Financial Ratios

Financial ratio analysis is one critical component of assessing a hospital's financial condition. The following metrics are examined in CHIA's quarterly and annual acute hospital financial reports:

Profitability

This category evaluates the ability of a hospital to generate a surplus.

- **Operating Margin (ratio of operating income to total revenue)**
  Definition: Operating Income/Total Revenue
  Operating income is income from normal operations of a hospital, including patient care and other activities, such as research, gift shops, parking and cafeteria, minus the expenses associated with such activities. Operating Margin is a critical ratio that measures how profitable the hospital is when looking at the performance of its primary activities. A negative Operating Margin is usually an early sign of financial difficulty.

- **Non-Operating margin (ratio of non-operating income to total revenue)**
  Definition: Non-Operating Income/Total Revenue
  Non-operating income includes items not related to operations, such as investment income, contributions, gains from the sale of assets and other unrelated business activities.

- **Total Margin (ratio of total income to total revenue)**
  Definition: Total Income/Total Revenue
  This ratio evaluates the overall profitability of the hospital using both operating surplus (loss) and non-operating surplus (loss).

Liquidity

This category evaluates the ability of the hospital to generate cash for normal business operations. A worsening liquidity position is usually a primary indication that a hospital is experiencing financial distress.

- **Current Ratio (ratio of current assets to current liabilities)**
  Definition: Total Current Assets/Total Current Liabilities
  This ratio measures the hospital's ability to meet its current liabilities with its current assets (assets expected to be realized in cash during the fiscal year). A ratio of 1.0 or higher indicates that all current liabilities could be

adequately covered by the hospital's existing current assets.

- **Average Days in Accounts Receivable (ratio of net patient accounts receivable to total revenue/365)**
  Definition: Net Patient Accounts Receivable/(Net Patient Service Revenue/365)
  This ratio measures the average number of days in the collection period. A larger number of days represent cash that is unavailable for use in operations.

- **Average Payment Period (ratio of current liabilities less estimated 3rd party settlements to total expenses less depreciation and amortization/365)**
  Definition: (Total Current Liabilities-Estimated 3rd Party Settlements)/ [(Total Expenses-(Depreciation Expense + Amortization Expense))/365)]
  This ratio measures the average number of days it takes a hospital to pay its bills.

Solvency/Capital Structure

This category evaluates the health of a hospital's capital structure, measuring how a hospital's assets are financed and how able the hospital is to take on more debt. Both measures are critical to the hospital's long-term solvency.

- **Debt Service Coverage Ratio-Total (ratio of total income plus interest expense plus depreciation and amortization to interest expense and current portion of long term debt)**
  Definition: (Total Income + Interest Expense + Depreciation Expense + Amortization Expense)/(Interest Expense + Current Portion of Long-Term Debt)
  This ratio measures the ability of a hospital to cover current debt obligation with funds derived from both operating and non-operating activity. Higher ratios indicate a hospital is better able to meet its financing commitments. A ratio of 1.0 indicates that average income would just cover current interest and principal payments on long-term debt.

- **Cash Flow to Total Debt (ratio of total income plus depreciation and amortization to total current liabilities plus total long-term debt)**
  Definition: (Total Income + Depreciation Expense + Amortization Expense)/(Current Liabilities + Long-Term Debt)
  This ratio reflects the amount of cash flow being applied to total outstanding debt (all current liabilities in addition to long-term debt) and reflects how much cash can be applied to debt repayment. The lower this ratio, the more likely a hospital will be unable to meet debt payments of interest and principal and the higher the likelihood of violating any debt covenants.

- **Equity Financing (ratio of net assets to total assets)**
  Definition: Total Net Assets/Total Assets
  This ratio reflects the ability of a hospital to take on more debt and is measured by the proportion of total assets financed by equity. Low values indicate a hospital has used substantial debt financing to fund asset acquisition and, therefore, may have difficulty taking on more debt to finance further asset acquisition.

Other Measures

The following items are individual line items from the Quarterly Financial Statements.

- **Operating Surplus (Loss):** Total dollar amount of surplus or loss derived from operating activities.

- **Total Surplus (Loss):** Total dollar amount of surplus or loss derived from all operating and non-operating activities.

- **Total Net Assets:** The difference between the Assets and Liabilities of a hospital. Comprised of retained earnings from operations and contributions from donors. Changes from year to year are attributable to two major categories (1) increases (decreases) in Unrestricted Net Assets (affected by operations) and (2) changes in Restricted Net Assets (restricted contributions).

- **Assets Whose Use is Limited:** The current and non-current monies set aside for specific purposes, such as debt repayment, funded depreciation and other board designated purposes. Board-designated funds are most readily available to the organization as the board has the ability to make these funds available if needed. This is a valuable measure because it reveals potential resources that the hospital may have available for cash flow if necessary.

- **Net Patient Service Revenue (NPSR) including premium revenue:** Revenue a hospital would expect to collect for services provided less contractual allowances. Net Patient Service Revenue is the primary source of revenue for a hospital.

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