Financial planning in the health care industry is increasingly a key factor in overall quality management. While many organizations understand that traditional strategic planning includes a component of financial planning, many organizations have not embraced the need to fully integrate financial and capital planning with operational or product line planning. The purpose of this brief review is to identify key issues in strategic and financial planning and whether the interdependence of these processes are suggestive of a quality approach to organizational management in competitive times.

Healthcare providers and systems face strong competitive and business pressures (Beith and Goldreich 2000; Cochrane 1999; Coddington, Moore and Clarke 1999; Curtright, Stolp-Smith, and Edell 2000; Eisenstat and Dixon 2000; Gapenski 1990; Greisler and Stupak 1999; Griffin and Schryver 2000; Griffith 2000; Hessler 2000; Krentz and Gish 2000; Lawry 1999; Meyer, Ladenson, Sharfstein, Danese, and Powe 2000; Press 2000; Prince and Sullivan 2000; Rivenson, Wheeler, Smith and Reiter, 2000; Langabeer 1998; Paulk and Hinden 2000; Zuckerman 2000). Healthcare has evolved into a highly competitive industry and healthcare providers have little competitive experience compared to other industries (Zuckerman 2000). Langabeer (1998) has indicated that for the first time in recent history, teaching hospitals are now exposed to a competitive market where smaller hospitals have been competitive for many years, echoed also by Cochrane (1999). Many organizations have found it necessary to clearly understand and communicate their capabilities (Hessler 2000; Lawry 1999; Moore, Ackerman, Wareham, and Stephens 2000; Zuckerman 2000) when evaluating planning responses. Such competitive pressures have led organizations to consider a performance management approach to organizational planning efforts (Cochrane 1999; Curtright et al. 2000; Greisler and Stupak 1999; Krentz and Gish 2000; Lohman 1999; Moore et al. 2000). Market turbulence requires medical groups (Griffin and Schryver 2000) and hospitals to use effective strategies to


**Role of Strategic Planning**

Strategic planning has been the process by which most healthcare organizations systematically identify their resources, capacities and capabilities for the purpose of generating profits and allocating capital resources (Federa and Miller 1992). A component of strategic planning, business strategy may be viewed as the outcome of healthcare organizations meeting their external environments (Ginn, Young and Beekun 1995). With increasing competition in the industry, organizations must make decisions about strategic selections in products and services to compete in turbulent markets (Beith and Goldreich 2000; Cochrane 1999; Eisenstat and Dixon 2000; Greisler and Stupak 1999; Griffin and Schryver 2000; Hatch and Rich 1999; Hessler 2000; Langabeer 1998; Lawry 1999; Moore et al. 2000; Paulk and Hinden 2000; Press 2000). Gin et al. (1995) found that business growth and strategy changes by type of strategic positioning of the organization. Clouse (1992) suggested that organizational growth objectives must be consistent with financial realities of capital structure, since rapid growth can strain resources and create financial difficulties. The same study also indicated that growth decisions should be understood to evaluate the impact on all organization objectives.

In evaluating the impact of organizational objectives, certain traditional strategies were found to have greater or lesser financial or long-term impact (Langabeer 1998). The same study found that market share was shown to have no relationship to financial performance. According to this study of teaching hospitals, pricing strategy was the most significant competitive strategy affecting financial performance. Low cost strategies have resulted in successful financial performance in stable markets,
but remain unproven in turbulent markets. Such findings are consistent with observations of others that organizations may position themselves to gain financial resources (Beith and Goldreich 2000; Cochrane 1999; Coddington, Moore and Clarke 1999; Gapenski, 1999; Ginn et al. 1995; Greisler and Stupak 1999; Hessler 2000; Press 2000; Seidner 1999). Despite these findings, Meyer et al. (2000), in their study of 1,721 primary care physicians found that cost control measures in the form of financial incentives do not have a consistent effect on costs of evaluation of common primary care problems.

Good decision making requires that financial impact of investments be recognized (Beith and Goldreich 2000; Campobasso 2000; Cochrane 1999; Farley 2000; Gapenski 1999; Gapenski 1990; Greisler and Stupak 1999; Hatch and Rich 1999; Hessler 2000; Krentz and Gish 2000; Lawry 1999; Prince and Sullivan 2000; Royer 2000; Seidner 1999; Sobol 2000). Straley and Schuster (1992) found that most hospitals lack formal processes for evaluating routine capital projects. They indicated that most hospitals will not invest in high return projects counter to their purpose and posit that formal project evaluation criteria must include financial, operational and market data. The authors indicate that projects that make business sense should rank higher than those that are counterintuitive to market conditions. They also indicated that various organizational structures and local market conditions might necessitate different evaluation criteria in the strategy planning process. Farley (2000) indicated similarly that organizations must profile investment risk to understand its impact in organizational planning and performance.

Greisler and Stupak (1999) found that executives made clinical capital investment decisions based on one of five models. In this study, three hundred and ninety six chief operating officers (COOs), chief medical officers (CMOs) and chief financial officers (CFOs) were asked which of five decision-making models in the literature have been used in acquiring clinical equipment. From their research, the garbage can model (a decision model based on ambiguity as the outgrowth of the confluence of people, problems and solutions) was the dominant method used to allocate resources for clinical capital equipment purchases. Other decision models (rational, incremental, mixed scanning and political decision models) were used, though there was a clear preference for the ambiguous approach. Executives surveyed indicated an interest in pursuing more quantitative methods.
Ginn et al. (1995) found that a significant relationship exists between hospitals’ business strategy and financial structure, also observed by Beith and Goldreich (2000) and Cochrane (1999). They indicated that proper strategy alignment requires financial strategy consistent with business strategy and further that the financial structure and the accounting and financial strategies of an organization are related to its business strategy. Sustainable financial growth models can assist organizations in program planning efforts (Clouse 1992) to ensure appropriate resource allocation.

The next section discusses the role of financial planning and its impact on business strategy and organizational structure.

**Role of Financial Planning**

Financial planning as a subset of organizational strategic planning comprises the largest section of this review, since the subject deals with the need for a more prominent connection between strategic operational planning and financial planning. For simplicity of presentation, the literature reviewed has been segmented along the common themes of financial management and financial performance, capital structure management, and cash management and financing.

**Comprehensive Financial Planning and Financial Performance**

Comprehensive financial planning is required to monitor financial capability over time (Beith and Goldreich 2000; Cochrane 1999; Federa and Miller 1992; Gapenski 1999; Royer 2000; Sobol 2000) in order to most profitably operate the organization. Owners seek to maximize profits (Ginn et al. 1995) regardless of the tax status of the organization, not for profit (NFP) or investor owned (IO). While organizations that do not generate a return on assets in excess of their cost of capital are in danger of financial failure (Hessler 2000; Langabeer 1998) numerous areas of financial performance are often used to monitor asset productivity (Sinaiko 1999; Sobol 2000). One predominant monitor of financial performance is return on invested capital (ROIC = operating margin / invested capital), also identified by Hatch and Rich (1999), which is widely used in other industries according to Langabeer (1998). This study indicates that ROIC links the income statement with the balance sheet for more effective asset productivity analysis. Ginn et al. (1995) and Sobol (2000) chose return on assets as a gauge for profitability. Other key indicators include cash to debt ratio, days cash on hand (Sinaiko 1999), and debt service coverage (Beith and Goldreich 2000; Cochrane 1999; Sobol 2000; Wheeler, Smith, Rivenson, and Reiter 2000) and cash flow to net patient revenue (Prince and
Sullivan 2000). Other factors, such as dividend policies affect financial decision-making (Smith, Wheeler, Rivenson, and Reiter 2000) and influence financial performance. Beith and Goldreich (2000) reported in their survey of 104 “Blue Chip” hospitals, those with credit ratings of AA or better, that the primary determinants of AA status continue to be balance sheet strength and positive earnings. Grossman (2000) indicates that credit ratings depend on an overall ability to pay creditors, which has critical implications for program planning efforts. Prince and Sullivan (2000) report that hospitals need a return of 6 percent to net operating revenue (equivalent to 6.3 percent of net patient revenue) in order to have the financial confidence to participate in strategic planning. Their model examined 42 community hospitals and ranked them as reactive (distressed or struggling facilities) or planning (implementing or proactive facilities). They found that proactive hospitals will strengthen their market niches through capital investments (driven by profitability) in selected medical technologies (high-speed data, voice and image transmissions, and enterprise-wide scheduling of patients and activities.

Capital intensity, the amount of capital required for operations was inversely related to financial performance according to Langabeer (1998). This study found that organizations in early stages of development required greater capital before becoming established, and less once they became a mature entity. Despite a detailed review of financial data available though Medicare Cost reports, caveats exist on the generalizability of these findings. Gapenski (1990) examined Monte Carlo risk simulation as a means of describing uncertainty projecting a better view of potential outcomes. This paper indicates that simulation analysis has application in budgeting, forecasting, and other areas of financial modeling, and should be part of a comprehensive process of financial planning. The study points out a common criticism of Monte Carlo simulation, that it provides no clear decision rule about how organizations should use the results. While Monte Carlo simulation can lead to better-informed decisions (Gapenski 1990), investment decisions are not solely a financial issue (Royer 2000; Straley and Schuster 1992).

Langbeer (1998) reported “The most viable process for improving margins is through the strategic selection of an appropriate portfolio of products and services to be offered (i.e., product market strategy)” (p. 520). Health systems can reduce overall capital needed by portfolio diversification effect of multiple facilities (Beith and Goldreich 2000; Federa and Miller 1992), by not using cash in preference of less costly debt (Beith and Goldreich 2000) and by “monitzing” their real estate
investments through sale, synthetic leasing arrangements, sale/leaseback transactions, and joint venture arrangements (Campobasso 2000; Egger 2000; Hessler 2000). Industry segment however affects organizational positioning in both business and financial strategy and financial structure (Ginn et al. 1995).

**Capital Structure Management**

Capital structure is the ratio of long term debt to total long term financing (long term debt plus equity) and is a strategic component of financial planning, according to Wheeler et al. (2000). The strategic use of capital structure in overall business strategy is important in particular since the allocation of capital is driven off the strategic plan (Beith and Goldreich 2000; Cochrane 1999; Federa and Miller 1992), and debtors of tax exempt organizations remain concerned with an organization's ability to operate as businesses while implementing their charitable missions (Grossman 2000). Capital structure strategy and costs of financing have clear implications on asset use because optimal capital structure minimizes cost of financing assets (Beith and Goldreich 2000; Gapenski 1999; Wheeler et al. 2000). Certain resource-dependent business strategies may be related to specific financial structures (Ginn et al. 1995) as well. In this study, the researchers found that the attitude of top management reflects an organization’s attitude toward financial risk and capital structure and that the type of ownership is not suggestive of capital structure. They also suggested that business risk is inversely related to financial risk and that business strategy is related to liquidity but not related to leverage. The literature does not suggest an expected relationship between leverage and liquidity but leverage and liquidity are significant predictors of bankruptcy and stability measures can assist in predicting bankruptcy (Ginn et al. 1995). Higher business risk suggests an increased targeting of equity financing (Wheeler et al. 2000), and strategic high-risk business purposes may cause organizations to pursue greater leverage despite the cost of debt. Smith et al. (2000) found that a negative relationship exists between debt and profits and a positive relationship exists between debt and growth.

Wheeler et al. (2000), in an interview of integrated delivery system chief financial officers (CFOs), found a strong focus on maintaining bond ratings and associated financial management practices. Access to favorable debt financing was reported more important to NFPs than to IO organizations due to the disparity in access to equity capital. Maintaining the ability to access future debt on favorable terms was considered part of maintaining a lower leveraged capital structure. Prior to the
elimination of the Medicare cost pass through, the use of tax-exempt debt by NFP organizations created a debt-heavy capital structure than observed in for profit organizations (Wheeler et al. 2000). The study suggests that the interplay between access to subsidized debt, restricted equity access, and the tax deductibility of debt payments creates market imperfections that affect NFP capital structures. High bond ratings and investment earnings were considered important because NFP health care organizations do not have easy access to equity capital. The authors of the study posited the issue of whether health care systems approach capital structure strategically. Their data suggest that IO entities do target capital structure and focus operations to achieve targets but that NFPs have a difficult time with creating equity capital. Lastly, all CFOs surveyed have targeted capital structures suggesting that they are integrating their own planning efforts into overall operational planning.

**Cash Management and Financing**

Health systems have deliberately increased cash reserves and decisions about cash balances are strategic, according to Rivenson et al. (2000) and Beith and Goldreich (2000). The authors report the reason for this is that cash use is final, and its use has important long-term implications. They found that bond-rating firms consider cash very important when evaluating financial strength and the ability to repay debt. Hessler (2000) also indicated that credit rating firms look for healthcare organizations with sound strategy and dominant market position with management teams that focus on core businesses. These bond credit rating firms value liquidity and high risk taking organizations are the least liquid (Beith and Goldreich 2000; Cochrane 1999; Hessler 2000; Ginn et al. 1995). Financial managers balance the need to maintain cash reserves and making investments attempting to take advantage of arbitrage between debt financing and returns on cash reserves for financing business activities (Beith and Goldreich 2000; Wheeler et al. 2000). Nevertheless, Beith and Goldreich (2000) reported that the key characteristic of every AA rated hospital was that they maintained “huge unrestricted cash and investment balances” (p.15).

Corporate finance theory assumes perfect information, no taxes, and no risk of bankruptcy (Smith et al. 2000), however information is not perfect, there are taxes, and bankruptcy is possible. Tax-exempt organizations have different access to owner equity (Rivenson et al. 2000; Smith et al. 2000; Wheeler et al. 2000), primarily since they are organized for charitable purposes. Therefore tax-
exempt organizations cannot provide an individual investor a return and as such, they approach capital markets differently than IO organizations (Smith et al. 2000).

Financing decisions are affected by taxes and contracting costs according to Smith et al. (2000). The same study reported a number of findings including that earnings are frequently used to support growth of assets, though increased debt is sometimes used. The author found that organizations tend to use earnings to support asset growth and debt for other uses. Some organizations studied had a preference for the use of internally generated funds (cash savings, operating profits), short and long term debt and equity. Rapid organizational growth is suggestive of debt financing (Ginn et al. 1995) and can create financial troubles for organizations that do not actively attempt to control growth (Cochrane 1999; Clouse 1992).

Increased fund raising can increase an organization’s sustainable growth rate (Clouse 1992), though donations are often the last source of financing (Smith et al. 2000). The source of financing is an important point for decision-making (Beith and Goldreich 2000; Cochrane 1999; Smith et al. 2000). Many CFOs have target financial measures and most espouse the traditional perspective that generally no relationship exists between a need for funds and the source of funds (Beith and Goldreich 2000; Smith et al. 2000).

Non-financial factors are also suggestive as determinants of financial decision-making (Beith and Goldreich 2000; Cochrane 1999; Smith et al. 2000).

**Financial Planning as a Component of Quality Management**

Finance functions in hospitals were not well integrated into overall operations prior to the federal government’s beginning transition to prospective payment system in 1983 (Ginn et al. 1995). Performance measurement became widely used in the 1990s with financial ratios becoming indicators of organizational success (Griffith 2000). Organizations have not been forward thinking related to future financial concerns (Zuckerman 2000) and leaders need to align organizational strategies with performance measures and management (Curtright et al. 2000; Eisenstat and Dixon 2000; Griffin and Schryver 2000; Moore et al. 2000; Royer 2000) to ensure that the chosen business strategies will have a chance to succeed. Links exist in industries outside of healthcare between strategy, market and financial performance, but have not been adopted greatly by the healthcare
industry (Langabeer 1998). While traditional economic measures of organizational performance dominate decision making, non-economic factors must be considered also according to Gapenski (1990). He indicates that in some circumstances, non-economic factors outweigh financial considerations.

Good management in combination with strong market positions and financial integration were reported as indicators of successful IDSs (Wheeler et al. 2000), a position also supported by Beith and Goldreich (2000), Cochrane (1999), Hessler (2000), Krentz and Gish (2000), Moore et al. (2000) and Royer (2000). Griffith (2000) referred to championship integrated health systems and stipulated that financial planning is a key element in their infrastructure. Curtright et al. (2000) implemented measurement based on organizational performance for all dimensions in their restructuring of the Mayo Clinic ambulatory care program. The authors found that evolving integrated health systems must align organizational strategies with performance measurement and management indicators, a finding also indicated by (Eisenstat and Dixon 2000). They also indicated that financial and operational indicators support using a measurement framework. The study indicated that the National Committee for Quality Assurance’s Health Plan Data Information Set (NCQA/HEDIS) incorporates financial performance data as well as operational indicators of performance. Furthermore, the Joint Commission on Accreditation of Healthcare Organization’s (JCAHO) ORYX system includes financial and organizational measurements.

Gapenski (1990) indicated that more complete information allows decision makers to better judge financial impact and make better investment decisions, and Ginn et al. (1995) and Moore et al. (2000) have suggested that strategic planning should be integrated with financial planning. Wheeler et al. reported the following from integrated health system CFOs surveyed: “Decisions about programs and the assets necessary to carry out those programs are the keys to strategic and financial success” (p.43). Lastly, Langabeer (1998) referred to integrated operational and financial planning in what was called a Strategic Management Model for Teaching Hospitals. This model, (Exhibit 1.) derives in part from Porter’s competitive strategies model adapted for the teaching hospital market environment.
Conclusion

It is clear from this brief review of the literature that health care organizations can benefit from the greater integration of financial planning and management methods in the overall context of strategic planning. Specific attention to blending the operating plan with the organization’s financial plan was cited as a key success factor by several authors (Ginn et al. 1995; Griffith 2000; Langabeer 1998; Moore et al. 2000; Royer 2000; Sinaiko 1999; Wheeler et al. 2000; Rivenson et al 2000). Survey results from leading integrated delivery system CFOs indicated that as a group, they considered specific financial targets for capital structure as well as for other measures of financial and operating performance (Wheeler et al. 2000). Griffith (2000) indicated that organizational champions blended financial and operational planning and indicated that they expected to perform well on all responsible measures of performance. He cites that the Baldridge quality award, JCAHO, and NCQA/HEDIS all consider the integration of finance into other aspects of operation critical. Other have indicated a strong preference for organizational leadership based on strong financial leadership (Beith and Goldreich 2000; Cochrane 1999; Hessler 2000; Gapenski 1990). Perhaps strongest of all, Greisler and Stupak (1999) report that through the adoption of quantitative planning/decision models focused on financial performance, healthcare leaders will position themselves to add value to their organizations. They indicate that the healthcare executive of the future will consider clinical resource allocations from a perspective which considers 1) a preference to decrease short and long term expense, 2) improved operational efficiency and effectiveness, and 3) decisions concomitantly considering the individuals, the problem at hand, and potential solutions. Not in contrary to the former findings, more effort should be directed at financial incentives as cost control measures as they relate to compensation-based systems (Meyer et al. 2000).

Implications and Future Directions

Practitioners and scholars would gain insight from this review and may find it useful to expand the review into the general economics and finance literature, as well as the trade and professional publications on the topic. Ginn et al (1995) suggests that this topic is valuable to practitioners involved in competitive assessment within their local markets, for the formulation of government policy, and for evaluating changes in reimbursement policy.

Areas for future development and research are many, including the ten that follow:

1. It might prove useful to identify “successful” health care organizations though financial strength indictors and determine whether financial planning is fully integrated into their
planning and operational processes, and, if the integration of financial planning is a statistically significant indicator of financial success.

2. In a similar manner to the question above, do certain industry segments (such as long term care, medical practice, rehabilitation, behavioral care, and others) have metrics for financial performance which differ from acute care hospitals or integrated health systems which are statistically significant?

3. Do health care organization leaders place a strong emphasis on the integration of financial planning and financial management throughout their organizations?

4. Are health care organizations adopting best in class practices from other industries to improve their strategic operational and financial planning efforts? What practices might translate readily into health care?

5. Are organizations projecting income or other future activity based only on point indicators or best-worst scenarios, or is simulation risk modeling increasing in use?

6. Are organizations changing from political capital allocation decision processes to return on investment and portfolio based models?

7. What software exists for capital allocation and portfolio modeling, and, are any programs practical for use at the organization level?

8. Are changes in investment returns due to recent stock market results causing financial managers to manage their investment resources differently?

9. At what levels of cash holdings do organizations begin active programs of investment?

10. Do organization leaders feel philanthropy and other development efforts will diminish in support of hospital giving, and, if so, what do leaders plan to do to manage the loss of donations?

Limitations

The previous review of finance literature has limitations given the brief nature of this paper. Attention was paid to surveying peer-reviewed journals at the expense of trade and professional publications. A wealth of information exists in such trade and professional publications and their commentary should be considered in a more comprehensive review of the literature on this topic.

Organizational financing requirements may fluctuate over time and with market conditions as the health care industry continues to consolidate and be impacted by managed care pressures. Such
changes can have the effect of suggesting financing and planning policies that may be more relevant to the specific market conditions and not as part of prudent business practice in general. Some authors (Langabeer 1998; Ginn et al. 1995) considered discrete datasets to adjust for potential fluctuations in market conditions while others (Langabeer 1998) indicated that they adjusted for regulatory impact as well.

Findings from this review may not be generalizable to the health care industry in general due primarily to the limited nature of the review. As such, findings also may not be generalizable to non-health care industries for the same reasons, and for reasons of industry practices and other unique factors.

Lastly, industry segments within health care may exhibit different behaviors from the hospitals and integrated health systems discussed due to the nature of the business lines, the typical capital structures of companies, access to capital, investor expectations, and regulatory influence among other factors.

List of Exhibits

Exhibit 1

Strategic Management Model for Teaching Hospitals

- Market Environment
- Academic Environment

- Competitive Strategies
  - Product Market
  - Positioning
  - Pricing
  - Capital Investment
  - Cost Leadership
  - Diversification

- Financial Performance

Adapted from Langabeer (1998)
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