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Aligning Capital Investment Decisions with the Balanced Scorecard

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The Balanced Scorecard (BSC) has evolved from a measurement tool to a strategic management tool used by thousands of organizations.

The Balanced Scorecard has proven to be a powerful tool in translating strategy into action in the for-profit sector and has recently been adopted by increasing numbers of not-for-profit organizations as well.

U Bridgeport Hospital, part of the Yale-New Haven Health System, has been using the BSC for over three years to effectively translate strategy into dayto-day operations.

The hospital has also linked the capital budgeting process to the BSC to ensure that resource allocation is aligned with strategic imperatives.

Increasingly, companies use the Balanced Scorecard (BSC) to link strategy and drive business results. A survey by Bain & Co. indicates that about 50 percent of Fortune 1000 companies in North America and 40 percent in Europe use a balanced scorecard.1 In many instances, the BSC has changed the focus on what gets measured and receives managerial attention. Organizational strategy is expressed in measurable objectives that guide day-to-day employee activities to achieve stated corporate goals.2 Because of the information the BSC can provide, the nature of monthly financial meetings can change from a focus on the things a company does well to the things that need improvement, with an emphasis on an appropriate action plan.3

The Balanced Scorecard has proven to be a powerful tool in translating strategy into action in the for-profit sector. Increasingly, mission driven organizations in the not-for-profit sector, such as health care organizations, have adopted the BSC to translate their missions into measurable operating objectives. Healthcare facilities are facing financial pressures as the federal government, managed care, and the shift to outpatient care forces downsizing and hospital closures across the nation. Only 40 percent of hospitals operate at a 3 percent margin, while 60 percent face operating losses. This financial pressure often translates into an increased emphasis on financial metrics to the exclusion of other parameters. Meaningful healthcare performance assessments must include other dimensions, specifically quality, patient satisfaction, and staff retention in addition to revenues and operating costs. The Balanced Scorecard provides a framework for measuring performance in a complex and changing medical environment. While retaining the financial measures, drivers of future financial success such as quality clinical outcomes, expert clinical care providers, satisfied patients, doctors and staff, and volume and market share growth are incorporated into the scorecard. This case study explores how Bridgeport Hospital uses the balanced scorecard to translate strategy into day-to-day operations and emphasizes the financial perspective including how the BSC has been linked to the capital budgeting process to ensure that resource allocation is aligned with strategic imperatives.

The BSC plays to the well-known management adage: if you want to manage it, you've got to measure it, and you get what you measure. Successful organizations use well-- designed measurement systems that are driven by strategy and reward behavior that contributes to success. The BSC helps managers to develop and articulate strategy more effectively. An important role of the BSC is the linking of results to daily operating activities, and to communicate them to operating managers. Managers can then help align employees to goals, facilitating change and innovation at all levels. The cascading process of creating employee metrics from those created at the managerial level marshals the synergy and commitment of diverse employees, and focuses decision making to attain company strategy. Atkinson and Epstein note that when BSC's are properly done, the scorecards at each level align employee efforts because the scorecards are "relevant, understandable, and controllable at the local level. The BSC also serves as a vehicle for communicating strategy and performance to organizational stakeholders. "As managers learn to manage with a dashboard of new dials, they will align themselves, and their organizations, behind their organization wide strategies with a precision they have never before experienced. They will position themselves to generate the profitability and demonstrate the accountability demanded by customers, shareholders, employees, and the communities around them."4 Enhancements such as the application of the scorecard to the performance appraisal process and the linkage to capital budgeting are future iterations of a BSC that practicing managers may consider as they modify and grow in their use of the BSC as a performance management system.

Bridgeport Hospital in Bridgeport, CT is a 425-bed, community teaching hospital that is part of the Yale-New Haven Health System (YNHHS). With fully capitated, managed care risk arrangements, the hospital had been experiencing operating losses. All management groups, including clinical leadership, came together for the process of mapping the course to attain strategic goals that would put the hospital in a financially healthy position. The leadership of the hospital, the Board of Directors, and the medical staff worked in tandem with administrative staff to craft a scenario for a successful future. Community physicians were selected to participate in refining and establishing clinical priorities.

In order to reach the strategic goals, they created a plan based upon the five strategic dimensions considered most critical to driving change. These five dimensions became the basis of their BSC, drove the critical success factors, supported the hospital's objectives and translated into measures on the scorecard.

1. Organizational health

2 Quality improvement

3. Process improvement

4. Volume and market share growth

5. Financial health

Organizational health focuses on employee learning, innovation, and growth. Metrics include vacancy and turnover rates, employee development plans, and employee satisfaction. Quality improvement focuses on patient satisfaction and outcomes. Metrics include patient satisfaction survey scores, patient safety, and joint Commission on Accreditation of Health Care Organizations (JCAHO) accreditation. Process improvement considers cycle and turnaround times and enhancing efficiency. Metrics include time to admit, length of stay, and the number of physicians connected to hospital clinical information systems.Volume and Market share is the customer perspective where the goal is increased ambulatory presence and the promotion of health and wellness. Expanded clinical services, coordinated clinical care centers, and increased ambulatory volume are some of the metrics. Financial health focuses on maximizing revenues and managing costs.

Eighteen months ago, the hospital was not cost efficient. It experienced an overall $1 million per year operating loss, laboratory test costs were well above the benchmark for teaching hospitals, protocols were needed to increase cost efficiency, and synergy with the parent YNHHS needed to increase. The hospital defined financial health in terms of activities that maximize revenue, manage costs, leverage YNHHS efficiencies, and create positive financial outcomes. Goals are increased coordination with YNHHS to achieve economies of scale, program development funds, and revenue enhancement strategies. Metrics to measure financial health include group purchasing, funded programs, managed care price increases, and cost per discharge.

The system achieved the following results in 2001:

* Managed care price increases were achieved.

* The number of full time equivalent employees was below budget.

* Costs per case for visiting nurse association were below goals.

At the close of 2001, lab tests per discharge costs were the same as Fiscal Year 2000, technology assessments with the parent corporation (YNHHS) were conducted for possible efficiency and economy of scale enhancements, and the hospital saved over $750,000 in supply chain management costs in its collaboration with YNHHS.

As utilization of the BSC filtered down through the organization, Bridgeport Hospital decided to integrate capital investment decision-making into the BSC framework. While a natural next step, many firms using the BSC ignore the implications for the capital budgeting process. Management decided to achieve the integration of strategy and resource allocation using a matrix approach where strategic goals were assigned weights and projects were evaluated based upon the project's ability to impact the strategic goals outlined in the scorecard.

The hospital began integrating the resource allocation decision into the BSC framework two years ago. Senior management agreed to develop a matrix to use to "score" capital investment projects (see

Exhibit 1). First, capital budgeting criteria were developed based on the BSC goals. Next, the group agreed upon weights to assign to each of the five objectives and the group agreed to evaluate all capital investments based on the score earned using the matrix.

The hospital used the matrix during the first year to evaluate capital investments. Though pleased with the initial results, during the second year, the hospital decided to divide capital investments into three categories: clinical, nonclinical, and information systems. Each category of project was assigned slightly different weights following an initial vote and subsequent discussion by the group members. The agreed upon weights for 2001 are shown in Exhibit 2.

The committee meets three to four times per year for approximately two hours each meeting to evaluate capital investment projects. Champions present each project, and then the group completes a final matrix using the relevant set of weights. The group evaluates each project based on its ability to affect each of the five criteria in Exhibit 2. The project score for each of the criteria must be 1, 5, or 10 based on weak, medium, or strong impact of the project on the criteria. The scores were forced into values of 1, 5, or 10 because the committee believed that permitting projects to receive any score between 1 and 10 would lead to time-consuming haggling. The scores reflect a consensus determined by the group rather than individual voting. The score is then multiplied by the weight in order to obtain a total project score. Project scores determine what gets funded based on availability of capital. The group then discusses the appropriateness of the outcome and makes adjustments based on required funding mandated by the HIPAA (Health Improvement Portability and Accountability Act) or JCAHO. Once the three meetings are complete, the committee knows what capital items will be funded in the three categories of clinical, nonclinical and information systems. A final meeting brings all three categories together for a final determination and consensus on funded projects. The participants are pleased with the results and applaud the matrix as a standard quality improvement tool that has allowed for the objectification of subjective data.

Assume the group evaluated a project and scored its ability to meet the five criteria as displayed in Exhibit 3. The project received only a "1" for its impact on safety, a "5" for impact on quality, and "10" for impact on process, revenues, and financial health. The project score is the weighted average of the scores for each of the five criteria. The maximum project score is a 10. This sample project scored 7.2 out of the possible 10.

Bridgeport Hospital has used the matrix approach for two years, and based on the success of the process, hospital management intends to continue to use it. The consensus building process has been a positive learning experience for clinicians and senior management to increase understanding of the clinical and other dimensions of care. It has generated much conversation about projects and has made a political process less subjective. The result is a more team-oriented approach to decision making that incorporates dialogue and discussion. The approach is more quantitative and is well received by the

scientifically trained physicians. The time spent on the process has been greatly reduced from the prior methods used. With the matrix there is also an openness in the process, where consensus is achieved in a meeting with all present as opposed to prior perceptions of the finance department assigning resources behind closed doors.

Another positive aspect of the matrix approach is that it forces tradeoffs among the historically conflict-laden camps of the clinicians and lay managers. The matrix approach forces the organization to look at how it allocates the capital budget and aligns it to strategy. The strategy is articulated in the goals of the BSC with performance metrics.

A potential shortcoming of this approach is the derivation of the weights and the interpretation of the final score. Although the weights are based on individual input from each committee member, members revisit the weights and review them to make adjustments if needed before the matrix is completed and scores are calculated. The facilitation process is also key to the success of the matrix and a strong, knowledgeable facilitator is required in order to avoid groupthink and politics during the meeting. The group must be willing to reach consensus and think of the greater good for the entire organization and not just their departmental specific concerns. The process is easy to game by voting a consistent 10 for desired projects; however, the gaming is done publicly and is kept to a minimum by good facilitation and peer pressure.

In the future, the hospital plans to push the process down to the managerial levels in the organization using Clinical Program Teams to complete the capital budget matrix. The clinical managers would complete the clinical matrix, the nonclinical managers would do the nonclinical matrix, and the information systems matrix would be completed by LS. managers with representatives of the first two groups as users of the systems. This second generation approach puts the decision making closer to the actual users of the equipment and other capital items requested and enhances the managerial role by empowering them to allocate capital. The hospital also projects a future trend of the separation of capital and operating budgets in order to safeguard the funds allocated for capital. A future scenario might also include completing the capital budget first (before the operating budget) in order to ensure that funds are retained for important capital expenditures.

The BSC is a permanent part of the strategic planning process at Bridgeport Hospital and its parent corporation, Yale-New Haven Health, because it represents good management and sound strategy. Currently at Yale-New Haven Hospital, performance is measured by tracking the objectives of the business plan quarterly with the management group. The group recommends actions for objectives that are not on target. Also tied to the business plan are corporate objectives that cascade from senior management to middle management that are also measured quarterly. Yale-New Haven Hospital has a Performance Improvement Program that has business plan measures shared with all employees around financial and patient satisfaction performance. Employees are rewarded financially with results tied to

payouts at the end of the year on a percentage of salary basis. The result has been an emphasis on continuous improvement and outcomes measurement and the recognition that the Balanced Scorecard is here for the long term at YNHHS. Future directions include the development of a system-wide dashboard that will include performance indicators for all system hospitals-Bridgeport Hospital, Greenwich Hospital, and Yale-New Haven Hospital.

The Balanced Scorecard has enabled the hospital to focus on its number one priority: the patient. In the past, it was common for financial metrics to overshadow all others; the "no margin, no mission" dilemma easily monopolized performance discussions. The scorecard has broadened the clinician's perspective to include financial issues and has educated the nonclinicians to clinical measures of care. It has given all staff a common language and increased their confidence level knowing that they affect aspects of running the hospital beyond their job function. The monthly review of the performance measures at the senior leadership meeting aligns all disciplines around the scorecard.5 Managers, supervisors and employees are updated quarterly on progress toward achieving organization-wide measures.

Lessons learned by the hospital are summarized in the word ownership. The scorecard was used as a planning tool, and the entire leadership team, physicians, and employees created the plan. Today, the clinical chairmen own the plan through the creation of eight teams consisting of a senior management liaison, the department chair, and a key staff person. These Clinical Program Teams review the metrics on the scorecard and meet monthly with the CEO to review progress. CEO Robert Trefry reported favorable operating margins and a positive bottom line at the close of Fiscal Year 2001-results attributable to monitoring and measuring key metrics that drive the business. The hospital also reported that it received the maximum level of accreditation from the nation's leading healthcare accrediting body, the Joint Commission on Accreditation of Healthcare Organizations and is ranked among the top 5 percent of nearly 4800 hospitals nationwide.

Notes

1. Kaplan & Norton, "A CFO Interview: On Balance," CFO, February 2001, p. 75.

2. A. Gumbos and Bridget Lyons, "Balanced Scorecard: Fad or Future," Strategic Finance, November 2002.

3. M. Green, J. Garrity, A. Gumbos, and B. Lyons, "Pitney Bowes Calls for New Metrics," Strategic Finance, May 2002, p. 34.

4. A. Atkinson and M. Epstein, "Measure for Measure," CMA Management, September 2002.

5. A. Gumbos, Bridget Lyons, and Dolly Bellhouse, "Journey to Destination 2005: How Bridgeport Hospital Uses a Balanced Scorecard to Map its Course," Strategic Finance, July-August 2002.

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