

# THE USE OF BALANCED SCORECARD IN CANADIAN HOSPITALS

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## ABSTRACT

Universal health care has been a cornerstone of Canada's social policy. Its citizens have come to expect world class service in this area and the government has provided generous funding support in the past. The funding environment, however, has changed since the 1990s. The federal and provincial governments not only cut back on funding but also demand greater accountability from the healthcare operators. In addition, skyrocketing healthcare costs have made it more difficult for healthcare operators to maintain the first class service expected by the public.

As a response to the changing operating environment, healthcare administrators have begun to implement modern management tools in their organizations to solve their financial problems while sustaining world class service. Business process reengineering (Ho, Chan, and Kidwell, 1999) and continuous quality improvement (Chan and Ho, 1997) are some management tools that have been implemented in American and Canadian hospitals, with varying degrees of success. Balanced scorecard,

a performance measurement and strategic management system, is one of the new tools adopted by management in hospitals. However, there has been little systematic evaluation on the use of balanced scorecard in health care. As a first step in filling this gap, this study assesses the extent of balanced scorecard initiatives in Canadian hospitals. It examines the hospital executives' perception on balanced scorecard, identifies factors that drive hospital management to undertake a balanced scorecard initiative, and attempts to find out why some balanced scorecard programs fail. Finally, the potential involvement of some Canadian hospitals with balanced scorecard in the future is reported.

The remainder of the paper is organized as follows. First, a brief description of *Balanced Scorecard* and the potential benefits of balanced scorecard to hospital management are presented. Next, the sample used in this study and the findings of the survey are reported. Some concluding remarks are included in the final section.

### **Balanced Scorecard and Healthcare**

Balanced scorecard is a strategic measurement and management system. It translates an organization's mission and strategy into a balanced set of integrated performance measures. It complements the traditional financial perspective with other non-financial perspectives such as customer satisfaction, internal business process, and learning and growth. It also mixes outcome measures, the lagging indicator, with performance drivers, the leading indicator, because "outcome measures without performance drivers do not communicate how the outcomes are to be achieved" (Kaplan and Norton 1996, p. 150). By selecting appropriate performance drivers and outcome measures to fit in the theory of business in a chain of cause and effect relationship, the organization will have a better idea of how to achieve its potential competitive advantage.

The balanced set of performance measures tells a concise yet complete story about the achievement and performance of the organization toward its mission and goals. It provides a holistic view of what is happening in the organization. By tying these performance measures to rewards, balanced scorecard ensures that the employees will do what is best for the organization as a whole. The first step in designing a balanced scorecard is the identification of strategic goals. The strategic goals need to be

agreed upon before scorecard measures can be developed. Otherwise, the scorecard measures might not reflect the organization's mission and strategies.

Similar to other for-profit and service organizations, balanced scorecard can be used by hospitals to do the following (Kaplan and Norton, 1996, p. 19):

- clarify and gain consensus about strategy,
- communicate strategy throughout the organization,
- align departmental and personal goals to the strategy,
- link strategic objectives to long-term targets and annual budgets,
- identify and align strategic initiatives,
- perform periodic and systematic strategic reviews, and
- obtain feedback to learn about and improve strategy.

A *true* balanced scorecard can have at least six benefits to healthcare providers: It can add customer insights, refocus internal operations, energize internal stakeholders, strengthen customer acquisition efforts, strengthen customer relations, and increase loyalty and returns of value (MacStravic, 1999). Although many successful stories of using balanced scorecard has been reported in other industries and service organizations, little evidence of its application to hospitals has been reported (Chow and et al, 1998). Nevertheless, there was a strong consensus among prominent researchers from many countries about the need to use balanced scorecard reporting by healthcare providers (Forgione, 1997).

## **Hospital Survey**

### **I. Sample Selection and Characteristics of Hospitals**

A random sample of 555 hospitals was selected from the *Guide to Canadian Healthcare Facilities, 1998-1999*, which represent about one-third of all hospitals and related facilities in the English-speaking provinces of Canada. The questionnaire was first reviewed by colleagues of the researchers and then mailed to the Chief Executive Officer (CEO) or President of the hospital in the summer of 1999.

Of the 555 questionnaires sent out, 121 completed questionnaires were returned, representing a response rate of 21.8 percent. Among the 121 respondent hospitals, over two-thirds are not affiliated with any academic health centers and they do not provide training for interns and residents. The sample hospitals are small, with 46 of them having less than 100 beds under their care and only 20 hospitals have over 500 beds. The majority (80%) of the respondent hospitals have heard of balanced scorecard and among these 97 hospitals, the number of hospitals which has implemented balanced scorecard (43 in total) in their organizations is fewer than the non-adopters (54 in total).

Results of the Chi-square tests of independence indicated that implementers of balanced scorecard tend to be larger hospitals ( $\chi^2 = 21.08$ ,  $p < 0.01$ ) and are affiliated with teaching institutions ( $\chi^2 = 14.20$ ,  $p < 0.01$ ). This is not unexpected as larger teaching hospitals do have more resources and are more innovative than smaller community hospitals in undertaking new initiatives.

## II. Executives' Understanding of Balanced Scorecard

Among the executives who have heard about balanced scorecard, they have a very good understanding on the characteristics of a balanced scorecard. On a scale of 1 (strongly disagree) to 5 (strongly agree), the executives indicated that a balanced scorecard should include an appropriate mix of outcome measures and performance drivers and that it links an organization's mission and strategy with objective measures. There is, however, still a slight misconception that balanced scorecard is more a performance measurement system (mean response of 4.08) than a strategic management system (mean response of 3.92) among the executives of the respondent hospital. Nevertheless, they did not think that the balanced scorecard is simply an ad hoc collection of financial and non-financial measures (mean response of 2.11) and it is *not* a fad (mean response of 2.32).

Between the two groups of hospitals that have and have not implemented the balanced scorecard, their executives' understanding on balance scorecard is similar but responses from the former group are more definite. This suggests that executives in hospitals that have implemented balanced scorecard (BSC hospitals) have a better understanding of the characteristics of a balanced scorecard and a stronger belief on its contribution to strategic management than the non-adopters. For implementers of balanced

scorecard, their experience could have confirmed their understanding that balanced scorecard is *not* an ad hoc collection of measures (mean response of 1.93) and it is *not* a fad (mean response of 2.26). The executives also felt strongly about the potential contribution of balanced scorecard as it links an organization's mission and strategy with objective measures (mean response of 4.35) and its benefits will outweigh its costs if implemented successfully (mean response of 4.09).

Also for BSC hospitals, their executives disagreed with the statements that their organization's performance measurement system is an ad hoc collection of financial and non-financial measures (mean response = 2.49) and that it relies too heavily on financial measures (mean response = 2.74). In fact, there is a significant difference in the executives' perception of their organization's current performance measurement system on these two aspects between the two groups of hospitals that have and have not implemented balanced scorecard. Executives of BSC hospitals indicated that their performance measurement system consists of a more balanced set of financial and non-financial measures, which are linked to their organization's strategic objectives.

### III. Experience of Hospitals That Have Implemented Balanced Scorecard

#### A. Factors Necessary for Balanced Scorecard to Succeed

For this group of hospitals, they have been involved in developing balanced scorecards for two years, on average. Even though over 95% of these hospitals have developed a balanced scorecard at the corporate level, only two-thirds have implemented balanced scorecards at the departmental level. This may be attributed to their lack of expertise in developing balanced scorecards, since less than 10% of the hospitals ranked their organizations as advanced implementers of balanced scorecard while the majority (over 65%) felt that they are novice users and beginners of the tool.

Given two years of experience in implementing balanced scorecards, only one executive claimed that the implementation has been very successful while three executives concluded that the implementation has been mostly unsuccessful. About three-quarters of the executives commented that the implementation has been moderately and quite successful and the rest made no comment as their organizations have just implemented balanced scorecard. When asked to list three factors that are

necessary for balanced scorecard to succeed, the commitment and buy-in of senior management and clinical staff has been mentioned over and over again by the executives. The ease of data collection as well as the accuracy, timeliness, and relevance of data/performance measures reported have also been cited as factors that are key to successful implementation of balanced scorecard. Other key factors reported by the executives include support of the organization's infrastructure, especially its information system, and education of staff on the implementation of balanced scorecards.

#### B. Reasons for Unsuccessful Implementation of Balanced Scorecard

Only 24 of the 43 executives of BSC hospitals responded on the extent that various factors have led to their organization's unsuccessful implementation of balanced scorecard. The responses are similar to and not significantly different from those identified by the non-adopters of balanced scorecard. Management identified the following factors: too busy solving short-term impending problems, too time consuming in developing balanced scorecards, too difficult in defining and measuring outcome and performance drivers of balanced scorecard, and the lack of skills and know-how. Another factor, the organization's strategic goals were not in place before the balanced scorecard was implemented, also contributed to their failing efforts. This suggests that some of the respondent hospitals have overlooked the importance of establishing their organization's mission and strategies first, which is essential to the successful implementation of balanced scorecard. Inadequate executive leadership, on the other hand, does not have an extensive impact on their unsuccessful implementation (mean response of 2.63) as compared to hospitals that decided not to implement balanced scorecard (mean response of 3.00).

In sum, lacking technical know-how and management commitment are the key factors that contributed towards the organization's unsuccessful implementation of balanced scorecard.

#### C. Enthusiasm on Balanced Scorecard

Even though the majority of the executives felt that their organizations have only been moderately successful in implementing balanced scorecard and achieving the desired objectives, their enthusiasm on balanced scorecard has grown. About three-quarters of the executives indicated that their enthusiasm in implementing balanced scorecard in their organizations have either changed significantly or

somewhat more. Moreover, over 90% of the executives expected the use of balanced scorecard in their organizations to increase significantly or somewhat more over the next five years. This implies that the vast majority of our respondents have had a positive experience with the implementation and they felt that balanced scorecard could be a good management tool for their organizations.

### **Concluding Remarks**

In response to the turbulent operating environment, Canadian hospitals have turned to modern management tools to manage their organizations. Balanced scorecard, a performance measurement and strategic management system, is one of the modern tools adopted by management in Canadian hospitals.

With respect to balanced scorecard, our respondents have a pretty good understanding on its characteristics and linkage to strategic management. The lack of technical know-how and management commitment are cited as the major reasons by one-third of the respondent hospitals that have decided not to implement balanced scorecard. For hospitals that have implemented balanced scorecard, these two factors also determine if the implementation will be successful or not. By and large, executives of BSC hospitals felt that their organizations have only been moderately successful in its implementation. Moreover, balanced scorecard, as a management tool, has not been extremely successful in achieving the organization's desired objectives of becoming a learning and growing organization and achieving focus on organizational change and strategies.

Despite the moderate success in the development of balanced scorecards, executives of the respondent hospitals are still enthusiastic about the tool and they expect its use to increase significantly in their organizations over the next five years. At this stage, the respondent hospitals have only limited experience on the implementation of balanced scorecard - an average of two years. But with more experience, the respondent hospitals will be in a better position to deal with implementation problems of balanced scorecard. Executives of BSC hospitals are still confident about the contribution of the tool to their organizations and consider it to be a useful tool in strategic management and performance measurement.

Thus, for administrators who want to implement balanced scorecard in their hospitals, they must be ready to provide the leadership, commit the resources and train their staff for the implementation to enhance its contribution to the organization and be successful. They can also learn from BSC hospitals, especially with respect to the measurement of performance indicators. This would make the implementation smoother and more likely to succeed than the early adopters of balanced scorecard. Finally, hospital management should attempt to strike a better balance between the use of financial and non-financial indicators as well as qualitative and quantitative indicators when developing the balanced scorecards for their organizations.

Exhibit 1

Executives' Perception on Balanced Scorecard

	Mean Response <sup>1</sup> (Standard Deviation)		
	Hospitals that have heard of balanced scorecard (n = 96)	Hospitals that have implemented balanced scorecard (n = 43)	Hospitals that have not implemented balanced scorecard (n = 53)
An appropriate mix of outcome (lagging indicators) and performance drivers (leading indicators) should be included in a balanced scorecard.	4.31 (0.59)	4.51 (0.55)	4.15 <sup>2</sup> (0.57)
Balanced scorecard linked an organization's mission and strategy with objective measures.	4.20 (0.79)	4.35 (0.65)	4.08 <sup>2</sup> (0.81)
Balanced scorecard is a performance measurement system.	4.08 (0.79)	4.35 (0.75)	3.87 <sup>2</sup> (0.83)
Balanced scorecard complements the financial measures of past performance with operational measures that drive future performance and growth.	3.93 (0.73)	4.07 (0.70)	3.81 (0.74)
Balanced scorecard is a strategic management system.	3.92 (0.84)	4.00 (0.87)	3.85 (0.82)
The benefit will outweigh the costs if a balanced scorecard was implemented successfully.	3.91 (0.71)	4.07 (0.67)	3.77 <sup>2</sup> (0.72)
Balanced scorecard produces a concise model to assist managers in tracking the organization's progress.	3.88 (0.68)	4.09 (0.68)	3.70 <sup>2</sup> (0.64)
Balanced scorecard provides a holistic view of what is happening in the organization.	3.76 (0.86)	3.95 (0.90)	3.60 <sup>2</sup> (0.79)
Balanced scorecard articulated and communicated the mission and goals of an organization better than traditional mission and goal statements.	3.41 (0.94)	3.42 (1.01)	3.40 (0.88)
Balanced scorecard is a fad.	2.32 (0.88)	2.28 (0.96)	2.36 (0.81)
Balanced scorecard is an ad hoc collection of financial and non-financial measures.	2.11 (0.99)	1.93 (0.91)	2.26 <sup>2</sup> (1.04)

<sup>1</sup>The higher the response, the stronger the executives' agreement with the statement in describing the characteristics of balanced scorecards (response scale of 1 to 5 where 1 = strongly disagree, 3 = neutral, and 5 = strongly agree).

<sup>2</sup>The difference in mean responses between the two groups of hospitals that have and have not implemented balanced scorecard is significant at  $p < 0.05$ .

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