

Balanced Score Card and its Relevance in Health Care

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Abstract

The Balanced Score Card (BSC) as a strategic management tool has been successfully implemented in various government institutions, military units, corporate houses, educational institutions, health care sector, etc.. This study discusses the use of BSC in health care sector. The primary objective of this paper is to show how it has been successfully implemented in major hospitals in developed countries like the US, Canada and the like, and how in the current global scenario, it becomes necessary for the Indian Hospitals to understand the framework and its characteristics, and use it as an effective strategic management tool.

Introduction

Today's health care organizations must deal with reduced government support, increased demand for quality healthcare services, stringent laws and more intense competition than ever before. Balanced Scorecard helps the healthcare organizations to improve their health by improving the health of their patients. BSC is increasingly being adopted in health care sector world wide, and is gaining foothold in India. Since Kaplan and Norton published their article proposing a balanced scorecard, the concept has been widely adopted by industry and health care provider organizations "The ultimate goal for hospitals today is providing world class health care at best value for money and the concept of customer satisfaction has been replaced with customer delight. Hospitals today carefully manage the performance of all the resources like infrastructure, human resource and capital investment," says Dr Chatterjee

The paper briefly discusses the original Balanced Scorecard of Kaplan and Norton & its evolution since then, followed by its application and its relevance in the hospitals in countries like Canada, UK and the US, and then its relevance in India in the current scenario. The benefits and challenges for India are also highlighted.

BALANCED SCORE CARD

Balanced score card can be called as a strategic management system, a communication tool or a measurement system. This as a new approach was given by Robert Kaplan of Harvard Business School and David Norton in the early 1990s. Traditionally organisations measured their performance using only the financial perspectives. Kaplan and Norton gave a more comprehensive view of business by including both financial and non financial measures which in turn helps the organisations act in their best long term interests. This approach provides the other significant dimensions (perspectives) that balance the financial perspective, and hence called a 'Balanced Score Card'.

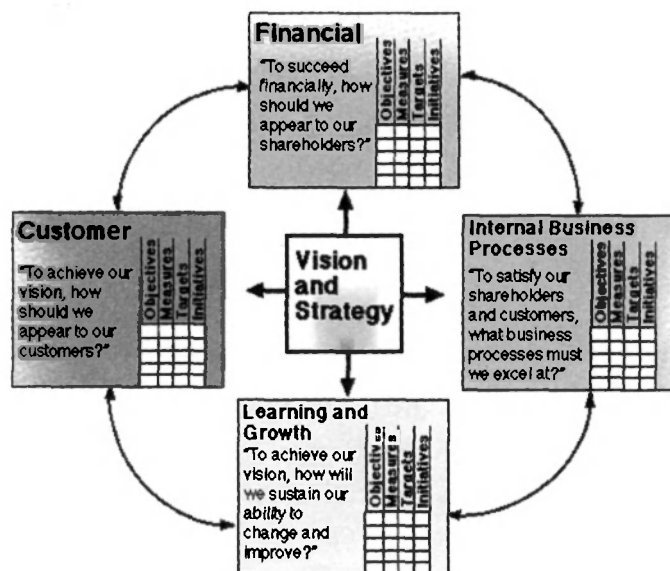
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Purpose of a Balanced Score Card

- To achieve the strategic objectives
- To evaluate process change
- To identify and align strategic initiatives
- To conduct periodic performance reviews
- To clarify and update budgets etc.,

The framework as given by Robert Kaplan & David Norton



Source: Robert & Kaplan, 'Using the Balanced Scorecard as a Strategic Management System', Harvard Business Review Year:

The scorecard is analysed from four different perspectives.

1. **The Financial Perspective** – It represents the long-term strategic objectives and measures the outcomes of the strategy in traditional financial terms. Some of common measures used are revenue growth, cost, profit margin, cash flow, net operating income etc.,
2. **The Customer Perspective** – It defines the values in the form of time, quality, performance etc that is delivered to the customer and the outcomes that arise out of these value proportions in the form of customer satisfaction, market share etc.,
3. **The Internal process Perspective** - It includes all activities and key processes in the company that fulfills customer's expectations. Kaplan and Norton talk about certain clusters like operations management, customer management, innovation etc.

4. **The innovation and learning perspective** – This is concerned with the jobs, the system and the organisations' climate and culture. Some of the key indicators could be employee satisfaction, employee turnover, attrition rate etc.

Significant changes in the use of BSC by organisations:

Since the introduction of the original model in early 1990 there have been significant changes in its application and firms have been altering the original model to suit to their unique organisational environment.

The original method identified only four perspectives) the framework shown above(and five or six good measures were selected in each of these. The biggest challenge was in the justification of the identified measures. Though this design is still being used, when the users do not have confidence in the information provided by these measures, it was abandoned.

In 1996 an improved new design (2nd generation design) had emerged where measures are based on a set of strategic objectives plotted on a strategic linkage model or a strategy map. This type of a strategy provides greater justification for measures chosen. This method is being adopted since 1996.

Since late 1990s the 3rd generation BSC which is a 'Vision or Destination Statement' has evolved in which a destination statement was created at the beginning of the design process and then select strategic activity and outcome objectives to respond to it.

BSC and its relevance in Health Care Sector

Hospitals across the globe choose Key Performance Indicators (KPI) in various perspectives as per their discretion. However, the most common perspectives identified seem to be the Financial, internal process, social accountability and customer perspective.

- Financial perspective focuses KPIs like accounts receivable, operating profit and cost of development of new medicines and facilities.
- Customer perspective comprises of KPIs like access to medical facilities by patients, cost of treatment, etc.

- Operations perspective talks of KPIs such as average length of the stay, development time for new facilities and medicines, surgical cases inpatient and outpatient and express arrivals and regular queues. These help in picking out the key processes requiring improvement.
- Social Accountability revolves around charity applications, disposal and recycling of medical waste, employee turnover, public health care initiatives and health education programmes. These help in knowing how far the Health care Facility has been successful in fulfilling its social responsibility.
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Balanced Scorecard in Healthcare Service-The Global scenario

The health care organizations in developed countries like the US, UK, Canada, France and the like have embraced Balance Scorecard to improve their operational performance, patient satisfaction, reduced wastage and so on. In the United States for instance, the federal government encourages health care organizations to define the quality of their services and, value of their services as measurable economic products. Improving quality in the health care industry became the focus not only of regulators, boards of directors, hospital administrators, and financial directors, but also insurance companies, employers, and patients. The following paragraphs give a brief account of how BSC has benefited the respective hospitals.

Case-1

BSC helped Medicare, one of the largest hospitals in the US, to widen its customer base to various managed care organizations, third party payers, patients, communities, and state and federal governments, who earlier included only patients and physicians.

Case-2

In Duke Children's Hospital (DCH), in Durham, N.C., the average length of stay of patients in hospital was 8 days, which was 20% longer than the national average, and average patient cost was 15000\$, which was more than

what would be reimbursed in 1997, and the hospital was faced with a projected \$7 million increase in annual losses within four years. Within 6 months of implementing BSC in Paediatric Intensive Care Unit (PICU), the cost per case reduced by 12% and patient satisfaction increased by 8%. By 2000, the hospital reduced cost per case by 5000\$ leading to a net gain of 4Mn \$.

Case-3

Peel Memorial Hospital (PMH) in Ontario, Canada shows another successful working example of BSC. The hospital introduced BSC when it was required to work with reduced government funding and with greater financial accountability. It reports that patient satisfaction levels have risen from 89 percent to 95 percent, staff satisfaction survey participation has risen from 33 percent to 75 percent, a better understanding of where to invest time and money in learning objectives has been achieved, and the organization has achieved the ability to relate mission and vision statements.

Case-4

Hudson River Psychiatric Center (HRPC) in Poughkeepsie, N.Y adopted BSC that had 20 indicators organized into four areas viz, finance, customer, innovation, and learning and internal business, each area reviewed on quarterly basis. After six quarters, HRPC has reported an overall improvement rate of 10 percent. Specific BSC areas of improvement include a 13 percent increase for the financial perspective, a 5 percent increase for the customer perspective, a 15 percent increase for internal business, and a 9 percent increase in the area of innovation and learning.

Case-5

Another successful application of the BSC can be found at West Park Health care Centre (WPHC), in Toronto, which adopted BSC in 1999. Community Report Card indicated that all areas had improved within two years except learning and growth. Physician satisfaction and team effectiveness were areas in need of attention. A staff education fund was created, and several research fellowships were established for employees

Case-6

Even the small neighbouring country-Afghanistan derive enormous results by adopting BSC in the healthcare sector. The Ministry of Public Health (MOPH) in Afghanistan has developed a balanced scorecard to regularly monitor the progress of its strategy to deliver a basic package of health services. It helped the ministry to summarize the multidimensional nature of health-

services performance, and is enabling managers to benchmark performance and identify strengths and weaknesses in the Afghan context. It has provided a platform for standardization of the monitoring of results across different donor, NGO, and government health-care providers, allowing MOPH to be a more useful steward of the health sector. The indicators for the capacity for service provision show many areas for improvement, notably the low number having a tuberculosis registry (median, 16%), functional laboratories (median, 18%) and having a minimum number of staff in place (median, 39%). As a result, the MOPH, donors and implementing agencies made it a priority to improve tuberculosis care and record-keeping, health-worker training and knowledge, *shura-e-sehie* activities, drug availability, laboratory capacity and use of clinical guidelines.

Case-7

However the awareness of BSC and its benefits, and its implementation among small hospitals is low compared to large hospitals in Canada. A study with a random sample of 555 hospitals was selected from the **Guide to Canadian Health** received only 121 filled in questionnaires, 46 of the respondent hospitals 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 among these 97 hospitals. There is, however, still a slight misconception that balanced scorecard is more a performance measurement system than a strategic management system. Executives in hospitals who 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.

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. In sum, lacking technical know-how and management commitment are the key factors that contributed towards the organization's unsuccessful implementation. However balanced scorecard, a performance measurement and strategic management system, is one of the modern tools adopted by management in Canadian hospitals. In a study of the BSC for behavioural health care organizations, Jose Santiago, MD, points out that BSC gives patients, providers, government agencies, and insurance companies the ability to make informed decisions about service quality by the analysis of clinical outcomes, price, and satisfaction. Health care management needs a variety of effective tools to navigate toward organizational goals. Today, for-profit and not-for-profit health care organizations are being forced to enter the information age due to changing demographics and profile of diseases.

Indian Perspective:

With healthcare now an organized sector and viewed as the sunshine industry, expectations, incentives and opportunities have increased, leading to cut-throat competition. Like any other service sector, customer satisfaction and revenue generation have today become top priority labels for hospital administrative departments. Hence, now corporate and other 'for profit' hospitals have joined the bandwagon and are putting great emphasis on performance management. Patients today are extremely choosy, there is soaring demand for qualitative services, and this can be achieved only when hospital employees are instilled with the enthusiasm to perform.

Though major studies have not been undertaken to show the effective implementation of BSC in India, some comments on its success by hospital top executives are summarised below in cases.

1. An executive from **Dr Reddy Labs** contends that their Performance management process flows from an in-house variant of the balanced score card, and involve an innovative variable pay plan that clearly differentiates high performers from the rest and motivates employees to strive for excellence.
2. While receiving award for Inspirational Workplace for **BM Birla Heart Research Centre**, **Eric P Rajendran** Executive Vice President & Group HR Head Group Human Resources Services CK Birla Group of Companies says "We had a great deal of confidence that we would be among the top two to three hospitals in terms of best HR Practices. We also had among the earliest implementations of balanced scorecard in our hospital. All these practices were converted into meaningful 'metrics/measures', which were constantly tracked to see whether we are making steady improvement so that our employees are inspired and engaged and fully own the vision of the organisation."
3. "Managers who learn methods of the patient management scorecard are in a better position to lead in future. They have the ability to think, plan and assess the success of their hospital," explains Rupak Barua, Chief Operating Officer, **Calcutta Medical Research Institute (CMRI), Kolkata**. **CMRI** has been using BSC for the past couple of years
4. Mr. Karunakar, GM- HR of **Apollo Hospitals Hyderabad** says "before adopting BSC, the operations at our hospital were far from oriented. Embracing BSC has meant a straight 33 per cent improvement in our top line". The hospital adopted BSC four years back.
5. Addressing to **HR problems in hospitals**, **Dr SK Biswas**, Vice President, Duncan Group, Kolkata, says BSC helps in pruning human resources of hospitals. He says "a hospital needs to explain its Key Result Areas (KRAs) to the employees, monitor their progress during the course of the financial year and then make them understand why a particular salary hike was given every year. This is the KRA for the HR Department of a well-administered hospital." The concept of 'Balanced Score Card Approach is relevant to ensure better focus, accountability, alignment and communication at all levels, with the objective of four inter-dependent perspectives of training and development, well-defined internal process, customer satisfaction, therefore more patients inflow and hence revenue viability. "The impact of behaviour of employees on the revenue and the importance of balanced score card needs to be explained to them," says Dr Biswas, a firm believer in this innovative concept.
6. While implementing Quality Improvement Program, **Tata Memorial Hospital, Mumbai** identified its serious problem as long waiting time for patients, increasing incidence of congestive cardiac failures. The reason lied in too many patients coming at same time, and the doctors unable to cope with rush. The appointment system with different specializations at different slots put in place, and the efficiency increased to 90% of patients are seen in less than 30 minutes. It has also identified that using large nappies for babies makes the babies uncomfortable and leads to huge wastage of material. The size of nappy reduced, the wastage came down while the babies smiled.
7. **Arvind Eye care System**, India's and the world's largest Eye care Service Provider for the last 30 years uses a patient management scorecard to asses how patients evaluate hospital's service which in turn helps to achieve its primary goals and objectives. The hospital with less than 1% of nation's ophthalmic manpower performs 5% of ophthalmic surgeries nationwide. It lists its critical success factors as quality, low cost, Familiarity, Patient satisfaction, Team spirit and efficient technology. Arvind Patient Management Score card is shown below.

Critical Success Factors	Objectives	Measurements	Values	Targets June'07	Initiatives
First Choice of Eye Patients	< Improve patient satisfaction level	Degree of out-patient satisfaction < Degree of in-patient satisfaction < Number of complaints < Number of patient surveys	79.3% 82.4% 104 1	90% 90% -30% 4 / yr.	< Develop guidelines for optimal patient satisfaction < Formulate a patient complaints procedure in all the department and execute it routinely
Quality	< Greater degree of trust from patients in the service provided < Patient perception < Patient partnership	< Degree of patient loyalty < Degree of perception over the facilities provided < Degree of patients understanding discharge instructions < Number of cooperative efforts < Number of eye camps	100% 82.0% 91.4% 4 20/mo.	100% 90% 100% 8 25/mo.	< Benchmark with regard to patient loyalty < Conduct loyalty programs to the nurses and doctors < Implement TQM principles < Give training to the counselors about discharge instructions < Conduct more outreach program
Hospital Image	< Improve the familiarity level with public	< Degree of public that know about AEH < Degree of public that prefer AEH service for eye care treatment	91.4% 65.0%	100% 80%	< Conduct more health awareness programs outside the hospital < Provide good quality service
Low cost Service Provider	< Provide service at an affordable cost	< Degree of patients who feel that service is provided at affordable cost	72.9%	90%	< Provide quality service to all without regard to their ability to pay
Pace of Service	< Reduce the service delays < Increase the number of touch points	< Service time and waiting time of patients in ODP department < Number of patient contacts	Ns=8.3mins Nq=7.4mins Ws=26mins Wq=24mins 8	-10% -10% -10% -10% 12	< Set up patient help desks wherever needed < Cycle time optimization < Increase the service counter that holds more delay
Team Spirit	< Inter-department satisfaction	< Degree of satisfaction - Reception - OPD - Specialty - EDP - Housekeeping - Laboratory - Management - Patient counselor - Store - Theater	88% 82% 84% 79% 83% 85% 80% 83% 72% 83%	90%	< Execute inter-department satisfaction study between all the departments < Organize meetings for the employees to enable communication between them

Source: Suresh Hemamalini & Raj Mithun, iSix Sigma Healthcare magazine

Benefits of using BSC in health care

- It helps hospitals to make an in-depth study of all their processes, include new processes and delete those processes which were contributing to non performance.
- It enables close monitoring of each process
- It improves the employee engagement index, training, development of existing employees as well as induction of fresh talents in the organisation every year.
- This leads to continuous improvement in internal processes like medical process excellence, nursing process excellence, leading to reduction of mortality, morbidity and infection rate.
- It also leads to cost optimisation of each individual procedure, thus helping to offer competitive package to customers.
- Enables effective implementation of WHO recommendations, on rational drug policies. As per WHO report, India consumes drugs worth Rs 7000 Cr per annum, which are either irrationally prescribed or available in irrational combinations. VHAS reports that about 68% of 60,000 formulations are obsolete, of which 30% are useless and 70% are harmful.

Challenges for India

The implementation of BSC in Indian Healthcare system is yet to take off in spite of its successful implementation in several Indian Hospitals for reasons like lack of awareness, lack of knowledge of implementation, lack of profit orientation, different targets of occupancy (Eg: Indian Hospitals aim at 80% occupancy while US hospitals are happy with 60%) and so on. Those who are ready to adopt BSC even are ought to encounter vital challenges that include:

- Identifying the right Key Performance Indicator-KPI
- Following too many metrics is a constat temptation. As Dr Biswas of CMRI aptly puts it, ore is not necessarily always better
- Employees experience the pressure to make the numbers
- Collecting data in non-IT enabled environment is a barrier
- It is time consuming as it is the case in Canadian Hospitals, the hospital managements are usually busy solving their short term impending problems, have little time focus on preventing problems in the long run

- Doctors may find it difficult to make it to the numbers in the words of Dr Ramesh Babu, Meenakshi Mission Hospital, Coimbatore, Doctors who are not used to manage the numbers may not be comfortable and digest BSC

Conclusion:

It may be concluded that the balanced scorecard is relevant to health care, but modification to reflect industry and organizational realities is necessary. It is used by a wide range of health care organizations and has been extended to applications beyond that of strategic management. It has been modified to include perspectives, such as quality of care, outcomes, and access. The BSC not only provides a framework for establishing performance measurement goals but also incorporates continued quality improvement throughout the organization. In the present globalised scenario, it becomes necessary for corporate hospitals to include the Balanced Score Card as a strategic management tool. However care should be taken in choosing KPIs. Also awareness should be created among employees about the benefits of BSC in raising employee satisfaction.

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