

## An application of Balanced Scorecard in healthcare organizations

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*Abstract:* Performance of health system and health organizations is currently a very hot topic, which is in the focus of both, developing and developed countries. Humankind has been aging, therefore the care of people's health in old age has become increasingly expensive and influence state budget of every country. And therefore, experts have been increasingly asking themselves what is the performance of their health systems and how efficient their healthcare organizations are. They have been trying to apply any tools and methods available for measuring and improving the performance of management in specific areas of health and health care. This paper focuses on the performance of healthcare organizations using Balanced Scorecard method (BSC). BSC can be defined as a management tool to comprehensively address the business performance and combines both, financial and non-financial indicators of business performance assessment. The aim of the research conducted at the Faculty of Management and Economics of Tomas Bata University in Zlín was to design a methodology for the application of BSC method into healthcare organizations. The method was tested on three types of healthcare organizations – hospital, spa organization, and social services organization. It also defines the specifics with emphasis on the management of organizations providing health care.

*Key words:* Healthcare, Balanced Scorecard, Healthcare Organization, Vision, Strategy

### 1 Introduction

According to WHO (2013) the system of health care is defined as all activities whose primary purpose is to promote, restore or maintain mental health. Evaluation of different systems of health care performance is very problematic. The difficulty is mainly based on the fact that no country is satisfied with the situation in the health sector, they constantly prepare reforms, create new laws and decrees that would provide quality, safe, affordable and effective health care. The second factor in the difficulty of assessing the situation on the health care sector is the existence of different approaches to measuring individual indicators of health care and any subjectivity in the measurement of certain indicators. The basic indicators, which are used for the evaluation of health care and to compare the level of health care in different countries, include indicators related to demographics, health indicators of the population, provision of health services indicators and indicators of health systems and health spending. The question of health systems performance was researched e.g. by Pelon, Belvis, Volpe and Ricciardi the article: Is there a relationship between health care models and their performance assessment? (2008)

Another view on the performance evaluation of health services is evaluating the performance of healthcare organizations themselves. The organization provides medical services are usually assessed through indicators of costs, revenues and profits. Although these indicators usually appear in comparative statistics, the evaluation according the profit is very problematic for several reasons states Stankova (2013):

- a) Most of the commercial enterprises stops to use profit as a key indicator of the economic situation. Cash-flow indicators and a comparison between revenues and expenditures have become more significant.
- b) Profit can be expressed in various forms, such as net profit, profit before tax, earning before interest and taxes, earnings before interest, tax and depreciation (Knapkova, Pavelkova Chodur, 2011, p.20)
- c) To assess profit of hospitals it is also important to determine their legal form of business. Non-profit hospitals functioning as endowments are not primarily based to generate profit and therefore their objective is balanced economy. In case of economic loss, non-profit hospitals

are usually supported from other funds; therefore the economic situation may be biased.

- d) In assessing the economic situation of hospitals there may occur an issue in which comes to the fore a question of ethics. Healthcare organizations can get into a difficult situation due to the fact that certain services are provided for free. On the other hand, the question of whether it is ethical to withhold this service someone who needs it and it depends on his health and life

For these reasons, not only in the company's business, but also in services has began to apply the concept of a comprehensive performance evaluation by different parameters. One of these tools, which we understand as a management tool for improving business performance is Balanced Scorecard.

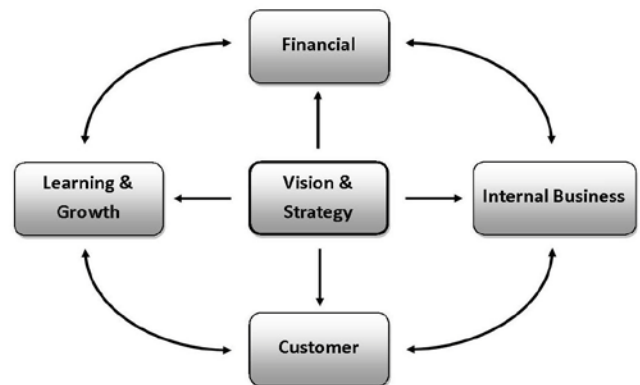
## 2. Problem Formulation

Balanced Scorecard (BSC) may be characterized as a management tool to comprehensively address the business performance and combines both financial and non-financial indicators of business performance assessment. Professor Robert S. Kaplan and David P. Norton developed this tool in 1992; authors have published a number of articles dealing with the application of BSC as a strategic management tool. (E.g. 1992, p. 70-79; 1996a, p. 53-79; 1996b; 2000, p. 167-176; 2001; 2009, p. 114-120 etc.). BSC is a popular method for creating links between operational activities and strategic objectives set by the company. The method is used in particular with regard to performance measurement. Among companies, this method is widely used and brings positive results to management. Currently, this method is being applied in less commercial environment such as health, social and spa services. Its main advantage is that it does not diminish the goals of company to financial indicators, but establishes a comprehensive system of financial and non-financial indicators to complex factors of business success. The traditional view of financial accounting is there "levelled" using the values of non-financial performance of the company, which are transformed into corporate vision, goals, and tactical and operational tasks. According Belohlavek, Kostanje and Suler (2006, p. 225) BSC provides a balanced view of strategy,

enabling it to better understanding by defining specific strategic goals.

Kaplan and Norton (1996a) in their studies state that the definition of basic vision and strategy is based on four critical perspectives, see figure 1.

Figure 1 Balanced Scorecard Framework (Kaplan and Norton, 1996a, s. 79)

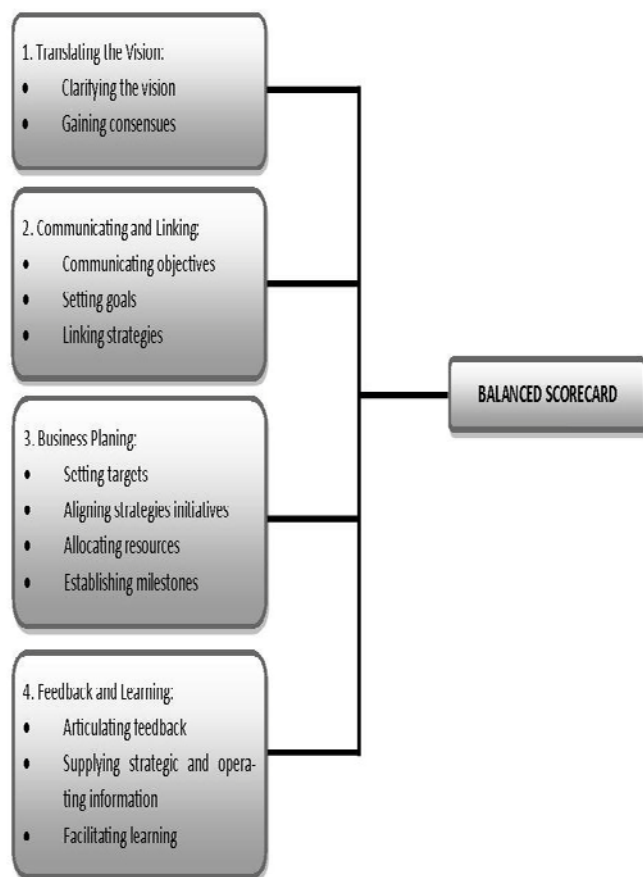


As it is evident from the figure above, defining specific indicators in these four perspectives helps companies to achieve their main goals through measurement of those, which are crucial for the fulfilment of vision and strategy. The main task of the BSC by Bisbe and Barrubés (2012, p. 919-927) for all perspectives is to define specific:

- Strategic objectives
- Indicators – indicators of meeting the strategic objectives
- Goals, objectives, deadlines
- Specific activities necessary to achieve the objectives

Chow et al. (1998) defined 4 steps of BSC implementation: translating the vision, communication and linking, business planning and feedback and learning, see figure 2.

Figure 2 Implementation steps of BSC (Chow et al., 1998)



## 2.1 Balanced Scorecard in healthcare

In 1999, Wachtel, Hartford, and Hughes (1999) examined whether BSC method is suitable for the management of medical organizations. The method has been implemented in Burn Centre of the University of Colorado Health Sciences Centre. The authors describe in detail the application process and the conclusion of this study is to claim that the BSC method can be implemented in the management of healthcare organizations and may bring many benefits.

Application of BSC method in healthcare organizations is also described by:

- Stevard and Bestor (2000, s. 75 – 82) - Applying a Balanced Scorecard to Health Care Organizations,
- Bisbe a Barrubés (2012, s. 919-927) - The Balanced Scorecard as a Management Tool for Assessing and Monitoring Strategy

Implementation in Health Care Organizations,

- Chow, Gaunulin, Haddad a Williamson (1998) - The Balanced Scorecard: A Potent Tool for Energizing and Focusing Healthcare Organization Management,
- Swayne, Duncan a Ginter (2008, s. 378-379) - Strategic management of health care organizations,
- Fortenberry (2010, s. 248-259) in monography Health care marketing: tools and techniques,
- Lin et al. (2013, s. 1917-1924), in article: Integrating hierarchical balanced scorecard with fuzzy linguistic for evaluating operating room performance in hospitals, apply BSC into specific environment such as hospitals are.

BSC application into management of healthcare organizations can be defined as follow:

- How patients perceive an organization (Customer perspective)
- What is financial situations (Financial Perspectives)
- What can we do to improve level of services? (Perspective of learning and growth)
- What do we want to be the best in? (Perspective of internal business processes)

Duke University Hospital explained these four perspectives in healthcare organizations as follow (Jones and Filip, 2000):

- Customer perspective: Deliver high quality innovative care while respecting needs of the patient.
- Financial perspective: Deliver strong and consistent financial performance in the eyes of payors and the board of trustees.
- Learning perspective: To be recognized as a leader in developing skills and performance of employees.
- Business perspective: To be recognized as the premier provider of health care services in our region/market.

Inamdar and Kaplan (2002) carried out the research through interviews with managers of nine healthcare organizations applying the BSC. Their research highlights the motivation factor as the basis for the successful implementation of the BSC in the healthcare organizations and defines potential benefits:

- It aligns the organization toward a more market-oriented, customer-focused strategy,
- It facilitates, monitors, and assesses the implementation of the strategy,
- It provides a communication and collaboration mechanism,
- It assigns accountability for performance at all levels of the organization,
- It provides continual feedback on the strategy and promotes adjustments to marketplace and regulatory changes.

### 3. Problem Solution

The design of Balanced Scorecard model in surveyed organizations can be partly done based on Kaplan's and Norton's procedures. The major differences, however, occur at the moment when there is an instantiation of creation in various scales, where it encounters the difference between basic idea of BSC – managing the performance – and the nature of non-profit healthcare facilities as they are today operated in the Czech Republic. These limitations and risk of BSC implementation will be described in the final part.

As the first step of the implementation it was essential to introduce the philosophy of BSC to top management of healthcare organization. This was done through personal consultations, interviews and discussions. The aim was to achieve universal acceptance and consensus.

Consequently, regarding to general acceptance of BSC introduction, the architecture of measurement had to be developed. It was discussed, whether specific strategic business units (SBU) describe the organization better than holistic view.

In healthcare organizations there can be considered as the SBU each department, which serves own patients, possess necessary technology and provides unique care and services. In the case of researched hospital, it was decided to define SBUs. On the other hand, due to a specific focus of other two surveyed organizations (Spa, Elderly care) it was decided to draft BSC at organization-wide level.

In the next stage, it was necessary to conduct further interviews with top management and in order to define the key objectives that the organization wishes to achieve through all four perspectives. Interviews took place rather free-form in order to get the widest possible idea of strategic objectives for the organizations. During this part, it was already initially unify and harmonize opinions, suggestions, and ideas to the general model of BSC. At this part, different materials and documents such as annual reports, budgets, and investments plan, internal documents and guidelines, the results of satisfaction surveys, and other relevant documents had to be used.

Following task was to logically organize "collected" targets into four perspectives of BSC. This rough and very comprehensive model was subsequently re-consulted with senior managers in order to achieve a general agreement. The most important choice was to select, which targets will become the part of the final model for each BSC perspective. In the context of appropriate selection of targets there had to be special tool involved: strategic map, which graphically represents how the goal fits together through four perspectives, and to verify whether these objectives complement through the entire map.

At the moment of setting targets for individual perspective, the workgroup stood before the final task – the selection of appropriate measurements that will be able to accurately measure forward and backward state of success in the fulfilment of individual goals. An important characteristic for each scale is the ability to capture present importance of the objective to be met. These scales must be analysed for reciprocal links in order to avoid mutual exclusion, in the context of the whole concept of BSC.

Nowadays, three different BSC models have been designed. Implementation and testing will follow.

### 4 Conclusion

Specifics of BSC design in healthcare

The common denominators of BSC design in healthcare organization were two terms: Costs and Patient (client). These points were key subjects of the negotiations for a simple reason: What is the performance for non-profit healthcare organization? To what extent can be costs reduced without reducing the quality of services provided? Can the organization think about increase in market share in the given circumstances or introducing special

pricing strategy? In such organization, only way to achieve performance is probably through so called operational excellence. Top managers of individual organizations agreed that their existence and further development primarily depend on grants and donations. So it seems that through BSC the organizations should gain reputation in order to attract potential patrons, sponsors and also facilitate the processes leading up to obtain grants.

As the greatest risk in successful introduction of BSC to non-profit healthcare is the implementation itself. Talking about basic philosophy of BSC and performance management associated with it, it must be noted that the driving force in this concept is the linking of strategic objectives into remuneration and incentive system. To what extent can non-profit organization financially stimulates its employees to achieve higher performance? In compare to private and commercial healthcare organizations, the hands of those non-profits are bounded.

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#### References:

- [1] BISBE, J. and BARRUBÉS, J., 2012. The Balanced Scorecard as a Management Tool for Assessing and Monitoring Strategy Implementation in Health Care Organizations. [on-line]. *Rev Esp Cardiol.*, 65(10). [cit. 2013-03-01]. Dostupné z: <http://www.revespcardiol.org/en/the-balanced-scorecard-as-management/articulo/90155071/>
- [2] CHOW, C. W., GANULIN, D., HADDAD, K. and WILLIAMSON, J., 1998. The Balanced Scorecard: A Potent Tool for Energizing and Focusing Healthcare Organization Management. [on-line]. *Journal of Healthcare Management*, 43(3). [cit. 2013-03-01]. Dostupné z: <http://www.biomedsearch.com/article/Balanced-Scorecard-Potent-Tool-Energizing/54586623.html>
- [3] FORTENBERRY, J. L., 2010. *Health care marketing: tools and techniques*. 3rd ed. Sudbury, Mass.: Jones and Bartlett Publishers. ISBN 978-0-7637-6327-5.
- [4] INAMDAR, N. a KAPLAN, R. S., 2002. Applying the Balanced Scorecard in Healthcare Provider Organizations. *Journal of Healthcare Management*, 47, s. 179 – 195.
- [5] JONES, M. and FILIP, S., 2000. Implementation and Outcomes of a Balanced Scorecard Model in Women's Services in an Academic Health Care Institution. *Quality Management in Health Care*, 8 no. 4 (2000): 40–51.
- [6] KAPLAN, R. S. and NORTON, D. P., 1992. The balanced scorecard – measures that drive performance. *Harvard Business Review*, 70, č. 1, s. 70 – 79. ISSN 0017-8012.
- [7] KAPLAN, R. S. and NORTON, D. P., 1996a. Linking the Balanced Scorecard to Strategy. [on-line]. *California Management Review*, 39(1). [cit. 2013-03-01]. Dostupné z: <http://xa.yimg.com/kq/groups/23484324/2012169140/name/BSC+to+Strategy.pdf>
- [8] KAPLAN, R. S. and NORTON, D. P., 1996b. *The Balanced Scorecard: Translating Strategy into Action*. Boston (MA): Harvard Business School Press. ISBN 0-87584-651-3.
- [9] KAPLAN, R. S. and NORTON, D. P., 2000. Having trouble with your strategy? Then map it. *Harvard Business Review*, 78/5, s. 167-176. ISSN 0017-8012.
- [10] KAPLAN, R. S. and NORTON, D. P., 2001. *The Strategy Focused Organization*. Boston (MA): Harvard Business School Press. ISBN 978-1-5785-1250-8.
- [11] KAPLAN, R. S. and NORTON, D. P., 2009. Linking the Balanced Scorecard to Strategy. [on-line]. *California Management Review*, 39(1). [cit. 2013-03-01]. Dostupné z: <http://new.dixie.edu/business/File/Christensens/MGMT%206400/ManagingAlliancesBS.pdf>
- [12] Knápková, A., D. Pavelková a M. Chodúr, 2011. *Měření a řízení výkonnosti podniku*. Praha: Linde. ISBN978-80-7201-882-6.
- [13] LIN Q, L., L. LIU, H. C. LIU and D. J. WANG, 2013. Integrating hierarchical balanced scorecard with fuzzy linguistic for evaluating operating room performance in hospitals. [on-line]. *Expert Systems with Applications*, 40(6). [cit. 2013-03-01]. Dostupné z: <http://www.sciencedirect.com/science/article/pii/S0957417412011219>
- [14] PELONE, F., de BELVIS, A. G., VOLPE, M. and RICCIARDI, W., 2008. Is there a relationship between health care models and their performance assessment? The results of an extensive review. *Italian Journal of Public Health*, 5(2), 102-106. Retrieved from [www.scopus.com](http://www.scopus.com).
- [15] STAŇKOVÁ, P. *Marketingové řízení nemocnic*. Žilina: GEORG, 2013. 208 s. ISBN 978-80-89401-64-2.
- [16] STEVARD, L. J. a BESTOR, W. E., 2000. Applying a Balanced Scorecard to Health Care Organizations. *The Journal of Corporate*

Accounting & Finance. March/April 2000, s. 75  
– 82.

- [17] SWAYNE, L. E., W. J. DUNCAN and P. M. GINTER, 2008. Strategic management of health care organizations. 6th ed. Chichester: John Wiley & Sons. ISBN 978-1-4051-7918-8.
- [18] Wachtel, T. L., C. E. Hartford, and J. A. Hughes, 1999. Building a balanced scorecard for a burn center. *Burns* 25: 431–37.
- [19] WHO, ©2013. WHO: World Health Organizations. [on-line]. [cit. 2013-01-16]. Dostupné z: [http://www.who.int/mental\\_health/evidence/WHO-AIMS/en/](http://www.who.int/mental_health/evidence/WHO-AIMS/en/)