

The Use of Balanced Scorecard to Support Achievement of Business Plan in Digestive Endoscopy Center, 2013

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ABSTRACT

Background: Digestive Endoscopy Center, Cipto Mangunkusumo Hospital was established in 2011 in which the concept was developed as center of excellence (CoE). The business plan was created based on safety and patient satisfaction, fast, accurate, quality and one stop services. The 2013 is the 2nd year in Digestive Endoscopy Center business plan development and it is expected to increase in many aspects. The aim of this study is to measure the performance of business plan in Digestive Endoscopy Center.

Method: This study was conducted from April-December 2013 with quantitative method and cross sectional studies on 76 subjects and also used secondary data from endoscopy's reports. The balanced scorecard contains 4 measurements, such as financial approach, customer approach, internal process approach, and learning and growth approach.

Results: The financial approach resulted that income from 2 types of patients (cash and insurance) were increased in 2013. The customer approach resulted a high satisfaction rate with mean 4.69 of 5 for patient satisfaction and the employee satisfaction increased in 2013 (mean 3.88 of 5) and in 2010 (mean 3.64 of 5). Internal process approach was measured using facilities and infrastructure discovered is increased too. Learning and growth approach resulted that accumulation of trainings, achievement of target of the trainings was increased.

Conclusion: The achievement of bussiness plan has been evaluated using balanced scorecard and showed that there is a balance on the financial approach, customer approach, internal process approach, and learning and growth approach.

Keywords: business plan, digestive endoscopy center, balance scorecard

ABSTRAK

Latar belakang: Pusat Endoskopi Saluran Cerna (PESC) Rumah Sakit Cipto Mangunkusumo dimana konsep dikembangkan sebagai center of excellent (CoE). Konsep rencana kerja mencakup keamanan dan kepuasan pasien, kecepatan, keakuratan, kualitas, dan pelayanan terpadu. Diharapkan pada tahun kedua rencana kerja mengalami peningkatan di berbagai aspek. Tujuan dari penelitian ini adalah untuk mengukur kinerja dari rencana kerja di PESC.

Metode: Penelitian ini dilakukan pada April-Desember 2013 dengan metode kuantitatif dan studi potong lintang pada 76 subjek dan juga data sekunder berdasarkan laporan endoskopi. Balanced scorecard menggunakan 4 pengukuran, yaitu pendekatan finansial, konsumen, proses internal, dan pembelajaran dan pertumbuhan.

Hasil: Pada pendekatan finansial didapatkan bahwa dua jenis sumber pembiayaan pasien (tunai dan asuransi) mengalami peningkatan di tahun 2013. Pada pendekatan konsumen didapat bahwa terdapat angka rata-rata kepuasan untuk pasien yaitu 4.69 dari skala 5, dan peningkatan pada rata-rata kepuasan pegawai yaitu 3,88 dari skala 5 di tahun 2013; dan 3,64 dari skala 5 di tahun 2010. Pada proses internal menilai fasilitas dan infrastruktur juga mengalami peningkatan. Pendekatan pembelajaran dan pertumbuhan dilihat dari jumlah pelatihan dan target yang dicapai juga mengalami peningkatan.

Simpulan: Pelaksanaan perencanaan kerja telah di evaluasi dengan baik menggunakan balanced scorecard dan menunjukkan adanya keseimbangan pada keempat aspek yang dinilai, yaitu pendekatan financial, konsumen, proses internal, dan pembelajaran dan pertumbuhan.

Kata kunci: rencana kerja, pusat endoskopi saluran cerna, balance scorecard

INTRODUCTION

Cipto Mangunkusumo Hospital is a hospital with type A public service institution which is also a teaching hospital that served in 3 areas: education, service, and research.¹ However, with the enactment of public services agency systems, corporate seek to develop its service business. One of the business center in the ministry is Digestive Endoscopy Center, under the Division of Gastroenterology, Department of Internal Medicine which began operating in early 2011. It has high value of investment medical devices. According to plan, the return of investment of Digestive Endoscopy Center was in 7 year, so evaluation is needed each year to assess the efficiency and effectiveness of services with high business investment.

One of the many ways to measure the performance of the hospital services is by using the balanced scorecard as a method of measurement.^{2,3} Balanced scorecard is a performance appraisal as a method of strategic view of the future oriented, this view gives message to the executives in measuring how the long-term financial performance is done by real efforts that generate value for the customer, as well as productivity and cost effectiveness in the internal business processes and increase the capability and personal commitment.⁴

METHOD

This study is a quantitative approach that starts from how the theory is constructed into a concept described in the variables measured. Primary data were taken directly from the source through interviews using a structured questionnaire which was conducted in April-December 2013. Secondary data were obtained from the reports on the amount of data such as hospital visits, regular reports and profiles of hospitals.

The population in this study was employees and patients who visited the Digestive Endoscopy Center, Division of Gastroenterology, Department of Internal Medicine, Cipto Mangunkusumo Hospital. Minimum number of samples is 69 subject to the satisfaction of the patient. In anticipation of the drop out then added 10 to the total respondents were 76 people.

Data will be inserted into the template EPIDATA then exported to SPSS 20, for further data processing. Univariate analysis was performed to see the description of the data such as the characteristics of respondents and the type of services performed. Bivariate analysis was done to see the relationship of each independent variable on the dependent variable.

RESULTS

There was an increase on patient revenue Digestive Endoscopy Center. In patients with cash in 2013 an increase of 554 compared to revenues in 2010, while in assurance patients in 2013 there was an increase in revenues of 423 compared to revenues in 2010. There is an increase in total revenue compared to expenditure budget plan made in 2013 amounted to 119.4. In 2010 there is no expenditure budget plan that cannot be compared (Table 1).

Cost reduction can be seen from the reduction in the total cost of expenditure budget plan to the total cost. Major cost reduction by 2013 is 49, while in 2010 there are no data cost reductions because none of business planning was done. So it can be said as a good start on cost reduction in Digestive Endoscopy Center once made business planning (Table 2).

Table 1. Patient revenue comparison at Digestive Endoscopy Center in 2013

	2010 (IDR)	EBP 2010	2013* (IDR)	EBP 2013 (IDR)	Increment/ lowering (%)
Patient with cash revenue	426,464,550.00		1,672,610,026.00		
Assurance patient revenue	2,360,885,450.00	-	7,081,078,596.00	7,329,884,979.00	119.4
Total revenue	2,787,350,000.00		8,753,688,622.00		

*Until November 2013; EBP: expenditure budget plan

Table 2. Cost reduction comparison at Digestive Endoscopy Center between 2010 and 2013

Year	Total EBP (IDR)	Total Cost (IDR)	Cost reduction (%)
2010	cost reduction data not available		
2013*	4,916,743,750.00	2,501,687,362.00	49

*Until August 2013; EBP: expenditure budget plan

The number of patients who received services at the Digestive Endoscopy Center increased by 172 between 2010 to 2013. Of a total number of patients as a whole in 2010 is 1,948 people and 3,358 people in 2013, namely, the number of patients based on the origin of the patients experienced an increase. Patients who come from the public wing amounted to 36 to 37 in 2013. However, the patients who come from emergency room increased quite significantly from 1 in 2010 to 7 in 2013 (Table 3).

Table 3. Comparison of patients based on patients origin at Digestive Endoscopy Center between 2010 and 2013

Patient origin	2010	2013*
	n ()	n ()
Public wing	694 (36)	1244 (37)
Pavilion	200 (10)	-
Other examination room	821 (42)	1326 (39)
Other hospital	170 (9)	239 (7)
Emergency room	20 (1)	236 (7)
Pediatric examination room	19 (1)	112 (3)
One day care	10 (1)	-
Integrated cardiovascular Examination room	3 (0)	2 (0)
Kencana	6 (0)	85 (3)
Intensive care unit	2 (0)	9 (0)
PTK	3 (0)	3 (0)
ICU emergency room	-	16 (0)
Pediatric emergency room	-	2 (0)
ICCU	-	36 (1)
Children ward	-	1 (0)
BCH	-	29 (1)
Operation Room	-	10 (0)
Perinatal ICU	-	1 (0)
Pediatric ICU	-	3 (0)
No Information	-	4 (0)
Total	1948 (100)	3358 (100)

*PTK: Pavilion tumbuh kembang; ICU: Intensive care unit; ICCU: intensive critical care unit; BCH: B.chirurgia

The number of medical treatments performed on Digestive Endoscopy Center until November 2013 increased by 141 from 2010 into 2,696 as many as 1,910 medical treatment. For this types of treatments, in which the treatments are served on Digestive Endoscopy Center until November 2013 also increased by 120 from the year 2010 as many as 25 to 30 types of treatment in 2013 (Table 4).

Table 4. Comparison of total medical treatment and types of medical treatment at Digestive Endoscopy Center between 2010 and 2013

Variable	2010	2013*	Increment / lowering ()
Total medical treatment	1,910	2,696	141
Types of medical treatment	25	30	120

*Until November 2013

In comparison of the Digestive Endoscopy Center staff who participated in the training, there was no staff trainings in 2010. Whereas in 2013, there were 8 doctors and 5 nurses who took the training. Total active staff in Digestive Endoscopy Center consists of 8 doctors in 2010 or 2013, while the nurses amounted 5 persons in 2010 and 13 in 2013. There was an increase in the number of nurses as much as 260 and there is an additional amount of medical staff in the year 2013 by 2 people. Total medical treatments in 2013 were increasing as big as 141.15 (Table 5).

Table 5. Comparison of learning and growth perspective at Digestive Endoscopy Center between 2010 and 2013

Variable	2010	2013	Increment / lowering ()
Total trained staff			
Nurse	0	5	-
Doctor	0	8	-
Total training	0	13	-
Targeted training			
Nurse	0	5	-
Doctor	0	8	-
Availability of information technology	-	Wifi available	-
Ratio of services (staff)			
Total staff			
Doctor	8	8	100
Nurse	5	13	260
Medical staff	0	2	-
Total medical treatment	1910	2969	141.15

*Until November 2013

DISCUSSION

Balanced scorecard is a management tool that is designed to enhance the contemporary company's ability to double its outstanding financial performance on an ongoing basis. Therefore in the company as an institution wealth creators, the use of the balanced scorecard in the management promised significant improvements to the company's ability to create wealth.⁵ Balanced scorecard also has a meaning as communication tools between the company management and employees in every planning.⁶

From a study by Kaplan & Norton, it can be concluded that in order to measure the performance of the executive in the future, required a comprehensive measure that includes four perspectives. The four perspectives are

financial perspective, customer perspective, internal process perspective, and the perspective of learning and growth.⁷ This measure tool is called the balanced scorecard, which is deemed comprehensive enough to motivate executives in realizing the performance of those four perspectives, aware that the company's financial success is sustainable.⁸⁻¹⁰

Balanced scorecard concept evolved in line with the implementation and development of the concept. At first balanced scorecard acts as an improvement over the performance of executive measurement system and changed the role of the strategic planning framework,^{9,10-15} then eventually as the basis of integrated performance management personal system.¹⁶⁻¹⁹

Based on the visible aspects of the financial perspective which are the measurement indicates whether the planning and implementation of strategies can provide fundamental improvements for the benefit of Digestive Endoscopy Center, this perspective see the picture of the development of Digestive Endoscopy Center by revenue from patients, either from patient with cash or the assurance patients. From the study, it can be seen an increase of the revenue of 423. In the year 2010 a patient with cash revenue was IDR 426,464,550.00 and by 2013 revenue rose to IDR 1,672,610,026.00, total revenue increased compared to the expenditure budget plan was 119.4. The increase in revenues in 2013 indicates that there has been improvement in terms of revenue in the Digestive Endoscopy Center. Calculation of cost reduction started in 2011 after business plan making in Digestive Endoscopy Center, so that by 2010 there was no data about that. In 2013 it can be seen that cost reduction of Digestive Endoscopy Center was 49. Which means financial was reduced 49 compared to the planning in early 2013.

Zudia's study assessing company performance showed good results and even experiencing good growth. From 2007 to 2009 they achieved cost effectiveness and generated optimal profit.²⁰ Meanwhile the revenue at the digestive endoscopy center in 2013 has increased by income from patients, making a financial perspective at the Digestive Endoscopy Center showed good results.

In addition to seeing in terms of revenue, which is assessed in the next balanced scorecard approach, is a perspective of customers. The customer perspective is a leading indicator. Poor performance in this perspective will reduce the number of customers in the future despite the better current financial performance. The customer perspective assessed patients who come to the Digestive Endoscopy Center in 2010 and 2013

including the number of complaints against the service; and the level of customer satisfaction which consists of patient satisfaction in receiving service and employee satisfaction while working. The total number of patients in Digestive Endoscopy Center in 2013 increased compared to 2010. In 2010, the number of patients were as many as 1,948 patients, whereas in 2013, until November 2013, patients who come in were as many as 3,358 patients. The increase in the number of patients was 172. For the number of complaints, Digestive Endoscopy Center did not provide data because of limited facilities and infrastructure.

At the level of satisfaction assessments, the SERVQUAL model developed by Parasuraman was performed.²¹ With a scale of 1-5 it can be concluded that the average employee satisfaction in 2010 and in 2013 did not experience significant improvement, so both in 2010 and in 2013, Digestive Endoscopy Center employees have sufficient levels of satisfaction from their performance in Digestive Endoscopy Center. Whereas in patients in 2013, it can be concluded that the patients in Digestive Endoscopy Center has a good level of satisfaction with the services provided in Digestive Endoscopy Center.

In the process internal perspective, management identifies internal business processes that are critical to achieve increasing value for customers and shareholders. This perspective will show the management how well the business has been running. Visible aspect is the amount of medical treatment and the type of medical treatment and facilities in Digestive Endoscopy Center in 2010 and 2013. The result is that an increase in the number and type of medical treatment in Digestive Endoscopy Center. In 2010 the number of medical treatment performed as many as 1,910 medical treatments, and then in 2013 the medical treatment performed as many as 2,696 medical treatments. While the types of medical treatment provided in Digestive Endoscopy Center in 2010 as many as 25 types of medical treatment, and in 2013 increased to 30 types of medical treatment.

There was also improvement in facilities and infrastructure of a pre endoscopy, the addition of medical treatments from 3 to 5 separate spaces in 2013. Beside, the sterilization chamber device in 2010 was only available in 1 door, then in 2013 there are 2 doors to separate the dirty strip and clean lines that will minimize the occurrence of nosocomial infection in Digestive Endoscopy Center. In a study done by Susilowati showed that there was a parallel influence of facilities available; such as information technology

and company performance.² Implementation and application of information technology in the balanced scorecard could improve company performance. So it can be concluded that the internal process perspective Digestive Endoscopy Center is good.

Other perspective is the perspective of learning and growth. This perspective comes from the factor of human resources, systems, and organizational procedures. In this study, the visible aspect is the number of staff in Digestive Endoscopy Center who participated in the training, planned training targets, means of information technology, as well as the ratio of the number of staff to service. The results showed that there has been an increase in the number of staffs trained, targeted training, the availability of information technology, and the number of employees to perform medical treatment at the Digestive Endoscopy Center.

In a study conducted in Semarang showed employee productivity continues to increase every year. It is seen from the measurement of the percentage rate of successful employee training by the company.²⁰ While the research by Susilowati showed that the hospital employees have the orientation to increase hospital profits which could be obtained through a high performance and increase number of patients.² It is concluded that learning perspective and growing aspects in Digestive Endoscopy Center in 2013 was good, as the amount of training and the target is appropriate.

CONCLUSION

There has been increased in all aspects of the balanced scorecard perspectives which applied to business planning at Digestive Endoscopy Center of Cipto Mangunkusumo Hospital. The use of the Balanced Scorecard is expected to support the operations of Cipto Mangunkusumo Hospital, which further improves the service quality of Cipto Mangunkusumo Hospital from various perspectives.

In addition, to obtain better results, further study is needed to be able to do a comparison of customer satisfaction within years, and this can be explained not only descriptive but also analytical.

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