Achieving Excellence in Veterans Healthcare—A Balanced Scorecard Approach

Key Words
benchmarking
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This article provides healthcare administrators and managers with a framework and model for developing a balanced scorecard and demonstrates the remarkable success of this process, which brings focus to leadership decisions about the allocation of resources. This scorecard was developed as a top management tool designed to structure multiple priorities of a large, complex, integrated healthcare system and to establish benchmarks to measure success in achieving targets for performance in identified areas. Significant benefits and positive results were derived from the implementation of the balanced scorecard, based upon benchmarks considered to be critical success factors. The network's chief executive officer and top leadership team set and articulated the network's primary operating principles: quality and efficiency in the provision of comprehensive healthcare and support services. Under the weighted benchmarks of the balanced scorecard, the facilities in the network were mandated to adhere to one nonnegotiable tenet: providing care that is second to none. The balanced scorecard approach to leadership continuously ensures that this is the primary goal and focal point for all activity within the network. To that end, systems are always in place to ensure that the network is fully successful on all performance measures relating to quality.

In the summer of 2000, the U.S. Department of Veterans Affairs (VA) Stars & Stripes Healthcare Network introduced the concept of a balanced scorecard as part of an overall strategic plan to identify multiple priorities and measures of success. The basic intention in developing the balanced scorecard was to further narrow the strategic plan's focus to ensure that efforts and resources were being allocated precisely as the network's chief executive officer (CEO) and executive leadership committee (ELC) had intended. The first draft of the balanced scorecard was presented to the ELC for review in March 2001.

This article offers an analysis of the successful implementation of a balanced scorecard as a benchmark and measure of success, and as a motivational tool for executive leadership and frontline staff in a large, complex VA healthcare network.

The goal is to provide healthcare administrators and managers with a framework for developing a balanced scorecard and to demonstrate the remarkable success of this process, which brings focus to all leadership actions and decisions that relate to the allocation of resources. Many ELC members contributed suggestions that were ultimately incorporated in the final version of this healthcare network's balanced scorecard.

Literature Review

An extensive review of the literature revealed that very few healthcare organizations have published balanced scorecards.

Kaplan and Norton (1996) developed the balanced scorecard in 1990 as a new performance model for 12 American companies. The need for such a model arose from the inadequacies of the traditional financial reporting process, which is based upon an outdated accounting system that was developed for noninteractive, independent organizations. Kaplan and Norton (1992) also developed the balanced scorecard as a way to put strategy and vision, not control, at the center of executive decision making.

Kaplan and Norton's research revealed that, as companies apply a balanced scorecard, they begin to recognize that the scorecard's use leads a fundamental change in the underlying assumptions about performance measurement. The participants in their study found that they could not implement the balanced scorecard without involving senior managers, who have the most complete picture of the company's vision and priorities. This was significant because most existing performance measurement systems have been designed and overseen by financial experts. Kaplan and Norton also developed the balanced scorecard to establish goals, but they assumed that people would adopt whatever behaviors are necessary to arrive at those established goals. They developed the balanced scorecard measures to involve employees in the overall vision. This pioneering research and development of the balanced scorecard provides an understanding that can help managers transcend traditional notions about functional barriers and ultimately lead to improved decision making and problem solving (Kaplan & Norton, 1993).

Kaplan and Norton liken the balanced scorecard to the dials in an airplane cockpit, in that it gives managers complex

information at a glance. The balanced scorecard also keeps an organization looking and moving forward instead of backward (Kaplan & Norton, 1992).

The balanced scorecard offers a proven framework for translating strategic objectives into performance measurements that evaluate the outcome of the implemented strategy, and provide feedback in the performance of strategic initiatives (Oliveira, 2001). Oliveira concludes that a balanced scorecard framework and its information foundation can be created using the following 10 steps:

- building the business case
- identifying the strategies
- identifying the tactical objectives
- identifying performance measurements
- identifying data sources for calculating the measurements
- creating a data warehouse to supply the data
- selecting information technology to create the data warehouse
- creating the balanced scorecard report
- managing the strategy using the balanced scorecard
- refining the tactical objectives in support of the strategy.

Oliveira also articulates that performance evaluation using a balanced scorecard helps to integrate business and clinical performance at strategic and tactical levels by measuring, disseminating, and analyzing interrelated performance indicators. By becoming proficient in the balanced scorecard approach, healthcare organizations can readily assess their vision and strategy and measure performance against established goals (Oliveira, 2001).

Meliones (2000) gives a first-person account of the dramatic, positive results achieved when a balanced scorecard was implemented at Duke Children's Hospital in Durham, NC, in 1996. At the time Duke Children's Hospital was facing an $11 million operating loss and had forced administrators to make cutbacks. Some caregivers believed that, as a result, the quality of care had deteriorated.

Meliones, the chief medical director at Duke Children's Hospital, revealed how implementing the balanced scorecard enabled the executive leadership to transform a debt-ridden hospital into a vibrant, profitable one. To keep the hospital afloat, clinicians and administrators learned to work together. Using the balanced scorecard, they dramatically cut costs without sacrificing the quality of patient care. After the balanced scorecard was implemented, customer service ratings jumped 18%. Improvements to internal business processes reduced the average length of stay by 21%, and the readmission rate fell from 7% to 3%. The total cost per patient fell by 30%, from nearly $15,000 in 1996 to $10,500 in 2000. The hospital's margin also soared from an $11 million annual loss in 1997 to a $4 million gain in 2000. Within just 6 months of implementation of the balanced scorecard, the cost per case in the intensive care unit was reduced by nearly 12% and patient satisfaction was improved by 8%. Meliones (2000) outlines the following three basic survival strategies to turn an organization around: communicate, communicate, communicate; chart your path; and never stop.

Setting

The VA Stars & Stripes Healthcare Network comprises 10 VA medical centers, 41 community-based clinics, and 12 Veterans Resource Centers providing healthcare to more than 200,000 veterans each year in Delaware, New York, Ohio, Pennsylvania, and West Virginia. The network has more than 9,600 employees and an annual budget of approximately $1 billion.

The network is one of 22 in the Veterans Health Administration. The VA operates the largest healthcare system in the United States; there is either a VA Medical Center or an outpatient clinic in each of the 50 states and Puerto Rico.

The network's balanced scorecard was published with the intention that other VA and private-sector hospitals and healthcare systems would be able to emulate it and use it as a benchmark for quality and performance.

Building a Balanced Scorecard

The process of building a balanced scorecard for the VA Stars & Stripes Healthcare Network evolved with input from the ELC, which comprises the CEOs and chiefs of staff of the network's 10 medical centers. The balanced scorecard was developed as a top management tool designed to structure the multiple priorities of a large, complex integrated healthcare system and to establish benchmarks to measure success in achieving targets for performance in identified areas (see **Table 1**).

The network's leadership developed this system of performance measurement by using information and data from patients, stakeholders, best practices, benchmarks, and industry trends to identify opportunities to enhance the delivery and quality of patient care and service. Monthly comparisons were in turn presented to the ELC, the "board" of top network and facility leadership. The balanced scorecard was designed to compare each facility's performance over time and with several comparable VA facilities in the five key areas of quality, access, customer satisfaction, performance, and finance/workload. A decision was made by the ELC to weight these five areas in the order above.

The weighting system was finalized to emphasize the strategic importance of the measures so that quality and efficiency received the most points. Customer satisfaction, access, and performance received the remaining points. Each measure relates to the overall performance of the network. For example, increased efficiency allows resources to be allocated to improve quality, access, and performance measures. Performance in quality can improve customer satisfaction. Increased access can have an effect upon customer satisfaction, but may strain resources. Therefore, performance on the measures must be balanced.

Table 1. Balanced Scorecard

Measure	Fiscal Year 1998	Fiscal Year 1999	Fiscal Year 2000	Fiscal Year 2001	Score
Quality					
Prevention index (%)	79	81	78	81	11
Overall clinical practice guidelines	N/M	N/M	Quadrant II	Quadrant II	11
Access (days until next available clinic slot)					
Audiology	N/M	N/M	81.2	42.4	1
Cardiology	N/M	N/M	47.8	27.8	1
Primary care	N/M	N/M	79.6	59	0
Eye care	N/M	N/M	133.9	68	0
Orthopedics	N/M	N/M	41.6	30.3	1
Urology	N/M	N/M	97.7	46.9	0
Number of patients treated	176,433	181,725	175,627	196,454	8
Customer Satisfaction (patients with a complaint)					
Education/information (%)	18	16	16	29	0
Pharmacy (%)	N/M	N/M	N/M	13	2
Visit coordination (%)	N/M	N/M	N/M	13	3
Q12 employee engagement	N/M	N/M	3.22		7
Performance					
Compensation and pension (C&P) examinations (days to complete)	42	29	31	38	0
Sufficient C&P examinations	97	98	98	99	4
Efficiency					
Obligation of budget (%)	N/M	100	99	100	14
Revenue enhancement goal achieved (%)	99	102	105	114	14
Total Score					77

N/M = not measured

This initial process involved determining which benchmarks were critical success factors; more than 100 potential measures were discussed and considered. Over the next few months, the 100 potential measures were whittled down to 36 specific measures. The first completed draft of the network's balanced scorecard was presented to the ELC for review and comment in March 2001.

The second phase of this initiative involved the difficult process of assigning relative values to each of the measures. There was significant discussion and disagreement during and after the assignment of the relative values. The guiding principle for weighting the measures was to develop this process in a way that would ensure that veterans served by this healthcare network receive the highest possible quality of care delivered in an efficient manner.

The Scorecard

The scorecard displays measures in the areas of quality, access, customer satisfaction, performance, and efficiency. Each measure was listed with a desired performance target and weighting as reflected in the total points of the available 100 allocated to each measure (see **Table 2**). Performance below stated targets required leadership action to improve performance above the stated target. For some measures, VA at the national level set the targets; for others, the leadership set the targets. The scoring was set by the leadership group to show relative importance. Therefore, out of 100 possible points, the measures of quality had 30, access had 20, customer satisfaction had 14, performance had 8, and efficiency had 28. Quality and efficiency require the most attention; however, the network cannot ignore access, customer satisfaction, or performance, because they contribute to the total score. The scorecard demonstrates "balance" because it is possible to do very well in a few areas but still do poorly on the final score. To perform successfully, it is necessary to balance attention and resources going to all areas. Yet, the scorecard focuses the organization with numerous (at least hundreds of) priorities and measures, to a single set of the most critical measures.

Table 2. Scoring Methodology

Measures	Target/Goal	Total Available Points	Scoring
Quality			
Prevention index	Fully successful, 78% Exceptional, 83%	15	≥83% = 15 78–82% = 11 <78% = 0
Overall clinical practice guidelines	Fully successful, Quadrants II and IV Exceptional, Quadrant I	15	QI = 15 QII, QIV = 11 QIII = 0
Access			
Audiology	≤30 days	2	≤30 days = 2 31–45 days = 1 ≥46 days = 0
Cardiology	≤30 days	2	
Primary care	≤30 days	2	
Eye care	≤30 days	2	
Orthopedics	≤30 days	2	
Urology	≤30 days	2	
Number of patients treated	Maintain or increase	8	8 points if > previous fiscal year 4 points if = previous fiscal year 0 points if < previous fiscal year
Customer Satisfaction			
Patients with a complaint	≤14 per 100	2	≤14 = 2 15–24 = 1 ≥25 = 0
Education/information	≤14 per 100	2	
Pharmacy	≤14 per 100	2	
Employee engagement	Survey score of >3	7	>3 = 7 2–3 = 4 <2 = 0
Performance			
Compensation and pension (C&P) examinations (days to complete)	<35 days	4	≤35 days = 4
Sufficient C&P examinations	98% or greater	4	>35 days = 0 ≥98% = 4 <98% = 0
Efficiency			
Obligation of budget (%)	Obligations = budget	14	≤100%=14 100.1–101%=10 >101%=0
Revenue enhancement goal achieved (%)	100% or more of collections goal	14	≥100%=14 98–99.9%=10 <98%=0

For example, in a 10-medical-center, $1-billion organization caring for more than 200,000 patients within a full continuum of care, there are literally hundreds of measures of performance—from the lowest level of detail (i.e., auditing or credit card payments) to more complex clinical measures (i.e., mortality, morbidity reviews of surgical cases). If the focus is on all of the hundreds of performance measures, the detail is overwhelming and the assessment of how well the organization is doing or where to focus is extremely difficult. The scorecard helps focus on a defined "most critical" list for serious measures.

Quality

Two indicators, the prevention index and the clinical practice guidelines, measure quality. The prevention index is an average score received by each medical center on a list of 9 clinical measures of preventive medicine (**Table 3**). The overall clinical practice guidelines comprise 14 indicators of clinical intervention for specific disease entities (**Table 4**). The VA selected both sets of indicators nationally for the entire enterprise. Measurement of these indicators is accomplished by independent chart audits by an organization under contract to the VA. Performance on these indicators is a measure of quality of healthcare delivery. As an example, chart audits are

Table 3. Prevention Index

	Goal	Fiscal Year 2001*
Overall prevention index	78	**81**
Influenza vaccination	55	**72**
Pneumonia vaccination	78	**79**
Tobacco-use screening	95	**97**
Alcohol screening	75	**76**
Hyperlipidemia	86	**89**
Breast cancer screening	90	*81*
Cervical cancer screening	90	*86*
Colorectal cancer screening	57	*31*
Prostate cancer education	80	**86**

*met = **bold**; not met = *italic*

Table 4. Examples of Clinical Guideline Measurement Topics

Guideline	Percentage of Audited Charts Meeting the Guideline Goal
Aspirin administration	90
Beta-blockers	80
Low-density lipoprotein (C < 130)	50
Annual HbA1c test	94
HbA1c < 9.5	80
Pedal pulse examination	81
Foot sensory examination	76
Retinal examination	
Blood pressure < 140/90 mm Hg	57
Lipid profile 2 years	90
Depression screening	80
Depression examination with positive screen	72
Tobacco-use screening	95
Mental health follow-up within 30 days of hospitalization	90

conducted to determine whether a cervical cancer screen was performed on patients for whom a cervical cancer screen is clinically indicated. The percentage of charts reviewed that reflect that the examination was completed becomes the score for that indicator. Similarly, as an example of the clinical practice guideline indicators, a chart of a chronic diabetic patient is audited to determine whether a pedal pulse examination was performed as clinically indicated. The percentage of charts reviewed that reflect that the examination was completed is then factored into the overall score. The scores for the overall clinical practice guideline are charted on a two-axis chart (**Figure 1**).

The scorecard displays the actual scores for both the prevention index and the clinical guidelines (see **Table 2**). For scores of 78–82%, 11 points are gained; for scores of 83% or higher, 15 points; and for scores below 78%, 0 points. Thus, leadership has stated verbally and in graphic form that resources shall be used to ensure performance of at least 78% on the prevention index. Those medical centers within the network that showed scores of less than 78% were directed to explain the lower-than-desired results and were instructed to develop and implement action plans for improvement (to include investing resources to improve performance if necessary).

Similarly, for the clinical guidelines scores, Quadrants II and IV received 11 points, whereas Quadrant I received 15. Quadrant III received 0 points. Again, this display made it abundantly clear whether the network was achieving the desired results. Leadership responded with action and resources when needed to ensure performance at a satisfactory level.

Access

Access is measured by the waiting time for the next available clinic slot for patients in six specialty clinics and the total number of patients treated in the network (see **Table 2**). The clinics were selected at the national level of the VA. Clinics with a waiting time of 31–45 days received a score of 1 point; clinics with a waiting time of less than 31 days received 2 points; clinics with a waiting time of more than 45 days received 0 points. Multiple strategies were implemented to reduce waiting times in these critical clinics, including scheduling improvements, efficiency initiatives, and additions to capacity.

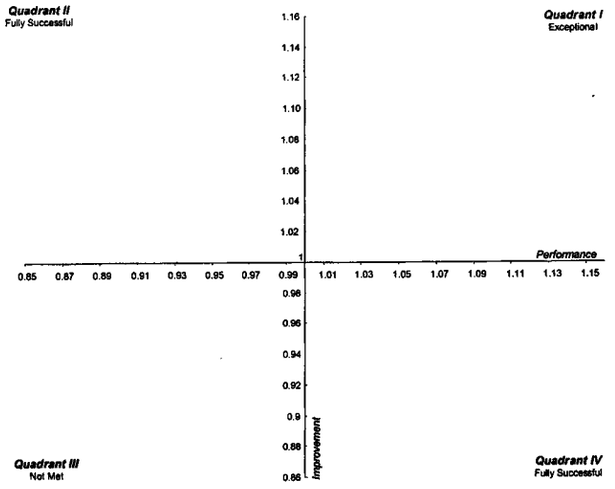
The total number of patients treated was measured by showing change from the previous fiscal year to the current one. An increase over the previous fiscal year received 8 points; maintaining the number of patients treated received 4 points; and having fewer patients treated received 0 points. This indicator reflected the leadership commitment to "maintaining or expanding services." It also reflected leadership's commitment to the idea that efficiency can lead to additional capacity.

Customer Satisfaction

Customer satisfaction is measured by three questions from a survey of patients who use VA services. The survey is administered at the national level of the VA and the Q12 survey of employees. The Q12 is a listing of questions administered by the Gallup organization to measure employee engagement. The network ELC selected three of the questions that the group identified as consistently providing low scores and that were considered important measures of customer satisfaction. The measures are scored according to the number of patients, on average, indicating a complaint. For simplicity of explanation, the data are shown as the number of patients per 100 who indicated a complaint (see **Table 2**). A score of 14 or less means that 14% or fewer patients offered some complaint in this area (2 points); a score of 15–24% received 1 point; and greater than 24% received a score of 0.

The Q12 survey system is administered by an external contracted organization to measure employee engagement in the organization. Engagement is the level of the employee's understanding of the organization's mission, commitment to

Figure 1. Scores for the Overall Clinical Practice Guideline



the organization, and the ability to get the job done. Data from the contract organization indicated that correlation of engagement was identified with high-performing organizations. The contract organization provided data for multiple VA sites as well as benchmarking to multiple private-sector organizations. By providing training recognitions and other actions, leadership focused on increasing employee engagement. A level of 3 or greater (on the Q12 tool) was determined to be desirable and received 7 points; a score of 2 to 3 received 4 points; and a score of lower than 2 received 0 points. Action plans were implemented to improve employee engagement and resources were provided to do so.

Performance

Performance was measured by the timeliness and sufficiency of completion of compensation and pension (C&P) examinations. (Within the VA, a veteran can submit a claim that his or her disability is due to events that occurred during active military service.) The C&P examination process has high priority to the VA and was provided with its own section within the scorecard. It is expected that C&P examinations will be completed within 35 days of a request for a medical examination and that the examinations will be judged sufficient by the VA's reviewing arm. As indicated in **Table 2**, 4 points are given for an average processing time of 35 days or less; completion times of more than 35 days received 0 points. Sufficiency of examinations at 98% after review received 4 points; sufficiency of less than 98% received 0 points. This scoring system demonstrated that performance at 35 days with 98% sufficiency was the minimum standard of performance. Any medical center with performance lower than this level was directed to initiate an action plan for improvement, to include the allocation of additional resources if needed.

Efficiency

Efficiency has two measures: obligation (spending) to current budget, and medical care collections fund (the VA's term for insurance collections, co-pays, and deductibles collections [i.e., revenue enhancement]).

Obligation to current budget identifies the amount of money spent versus budgeted funds. It is possible to spend money in excess of budget; however, this requires the network to use reserves, which is not desirable. Therefore, obligating 100% or less of available resources receives 14 points; obligating 100.1–101% of budget plan receives 10 points; and spending more than 101% of budget receives a score of 0 (see **Table 2**). This measure is calculated each month for review. Any medical center shown to be spending more than 100% is directed to implement an action plan to ensure adequate performance.

A collections goal is set for the network and then spread among each medical center. This is a major revenue component of operations within the network. Collections of 100% or more of goal receive 14 points; collections of 98–99.9% receive 10 points; collections that fall below 98% of goal receive 0 points (see **Table 2**). Medical centers that achieve less than the expected collections are required to implement an action plan to improve collections.

Numerous measures were considered during development of the balanced scorecard. However, the measures discussed above were finally selected as the ones most critical to the network's success. Data were collected monthly and discussed by leadership. When actions were required, the network and medical leadership were aware of the plans and reviewed performance for improvement. Improvement in performance on these measures was demonstrated over time (see **Table 1**).

Benefits—Measures That Drive Performance

The balanced scorecard was introduced in the summer of 2000 as a management tool to benchmark performance and to define the direction of a large, complex healthcare network.

Significant benefits and positive results were derived from the implementation of the balanced scorecard, based upon benchmarks that were considered critical success factors. These positive results include a marked increase in several quality indicators and scores on customer service surveys.

The balanced scorecard framework was designed to provide a system to ensure that the network is fully successful on all performance measures relating to quality. In FY 2000, the network scored a 78% on the prevention index, a series of measures shown in medical literature to be the most closely related to disease prevention. After the implementation of the balanced scorecard, the network exceeded the "fully successful" benchmark of 78% with a score of 81% (see **Table 2**); this represents a 4% increase in this key indicator of performance after the scorecards were introduced.

The VA Stars & Stripes Healthcare Network also demonstrated a 20% increase in customer service scores specifically

related to shared decision making and patient family health education in the months after implementation of the balanced scorecard.

These benefits are attributed to a process that helped the ELC focus actions and deliberations on how resources are allocated. The process also demonstrated the interrelationship of each of the five benchmark areas (quality, access, customer satisfaction, performance, and finance/workload) and the need to do well in each of these areas to succeed (it is impossible to perform poorly in any one area without the overall score dropping; therefore, each area must have specific target goals).

The balanced scorecard will be reviewed annually as part of the strategic planning process. It is anticipated that minor modifications will be needed and that the weights may need to be adjusted as priorities or availability of resources changes.

The Balanced Scorecard Can Change Culture

The implementation of a balanced scorecard, which tracks multiple priority measures through a series of benchmarked critical success factors, was developed as the primary system of measurement for the overall strategic plan of the VA Stars & Stripes Healthcare Network. The basic purpose of developing the balanced scorecard was to narrow the focus of the strategic plan to ensure that efforts and resources were being allocated precisely as leadership intended.

Significant benefits and positive results were realized from the implementation of the balanced scorecard, which shows high performance in quality scores, ranging from 78% to 81% success on high standards of preventive medicine scores. In addition, performance in Quadrant II (see **Figure 1**) indicates continued improvement in the accomplishment of multiple clinical guidelines in clinical care. Waiting times also decreased in all six of the measured clinics. The number of patients treated increased from 176,433 to 196,454 in just 3 years, and budget performance achieved the highest scores in both execution (obligations within available resources) and revenue enhancement. These benefits are attributed to a process that enables leadership to focus its actions and resource allocation decisions on those areas it deems most critical.

In summary, the network's CEO and top leadership team set and clearly articulated the network's primary operating principles: quality and efficiency in the provision of comprehensive healthcare and support services. Under the weighted benchmarks of the balanced scorecard, the facilities in the network were mandated to adhere to one non-negotiable tenet—providing care that is second to none. The balanced scorecard approach to leadership continuously ensures that this is the primary goal and focal point for all activity within the network. To that end, systems are always in place to ensure that the network is fully successful on all performance measures relating to quality.

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Differences Among Hospitals in Delivery of Care for Heart Failure

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9. The study concluded that all types of hospitals have opportunities to improve the processes of care for their heart failure patients. The authors believe that this finding is important in light of the intent of which entity to publicly report hospital quality-of-care data?

a. Centers for Medicare & Medicaid Services
b. Joint Commission on Accreditation of Healthcare Organizations
c. U.S. News and World Report magazine
d. American Medical Association

10. The authors comment that the root causes of the noted suboptimal quality of care for heart failure patients must be understood. What is the primary reason they give for encouraging this type of activity?

a. Heart failure care is the most expensive of all the cardiovascular diseases.
b. Outcomes will be greatly improved.
c. The frustration of the hospital quality improvement teams will be decreased.
d. Quality improvement interventions targeted at the root causes of care process deficiencies are more likely to yield positive results.