BALANCED SCORECARD COLLABORATIVE

DUKE CHILDREN'S

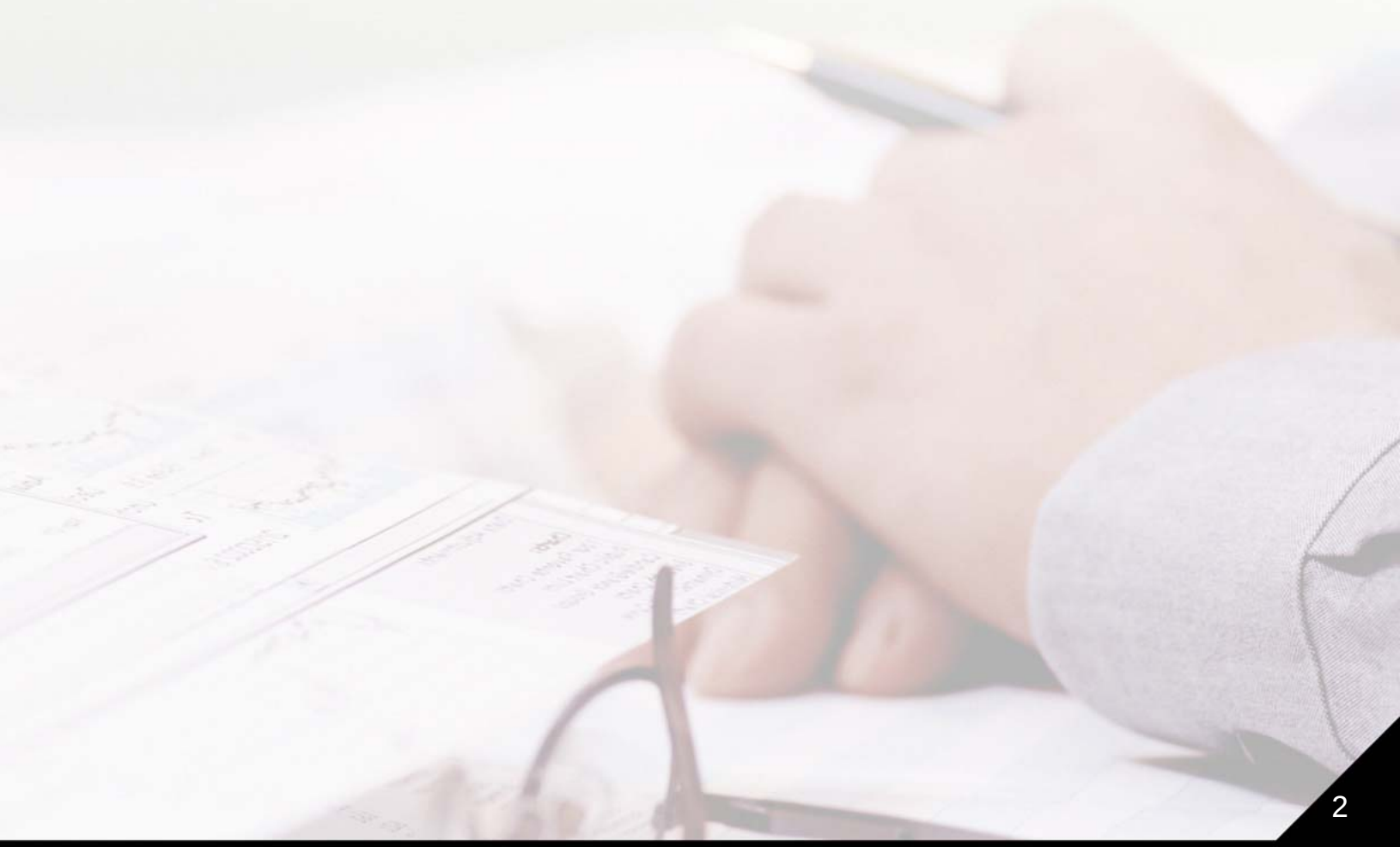
Duke Children's Hospital

Balanced Scorecard Hall of Fame™ Case Studies

Duke Children's Hospital Case Abstract

Facing annual losses of over $11 million, Dr. Jon Meliones, Chief Medical Director of Duke Children's Hospital, had to either cut the hospital's resources or better manage its existing ones. Unwilling to cripple service delivery, Meliones turned to the Balanced Scorecard in order to align the hospital's strategy with its resource management. Using the scorecard, the hospital significantly reduced its per-patient costs, shortened lengths of stay, and increased its net market gain by $15 million. Now relying on 10 Balanced Scorecards, Duke Children's Hospital is able to make a healthy profit while providing excellent patient care. A member of the BSCol Hall of Fame, Duke Children's Hospital exemplifies four SFO principles:

- Translate the Strategy to Operational Terms
- Align the Organization to the Strategy
- Make Strategy a Continual Process
- Mobilize Change Through Executive Leadership



Duke's Growing Challenge

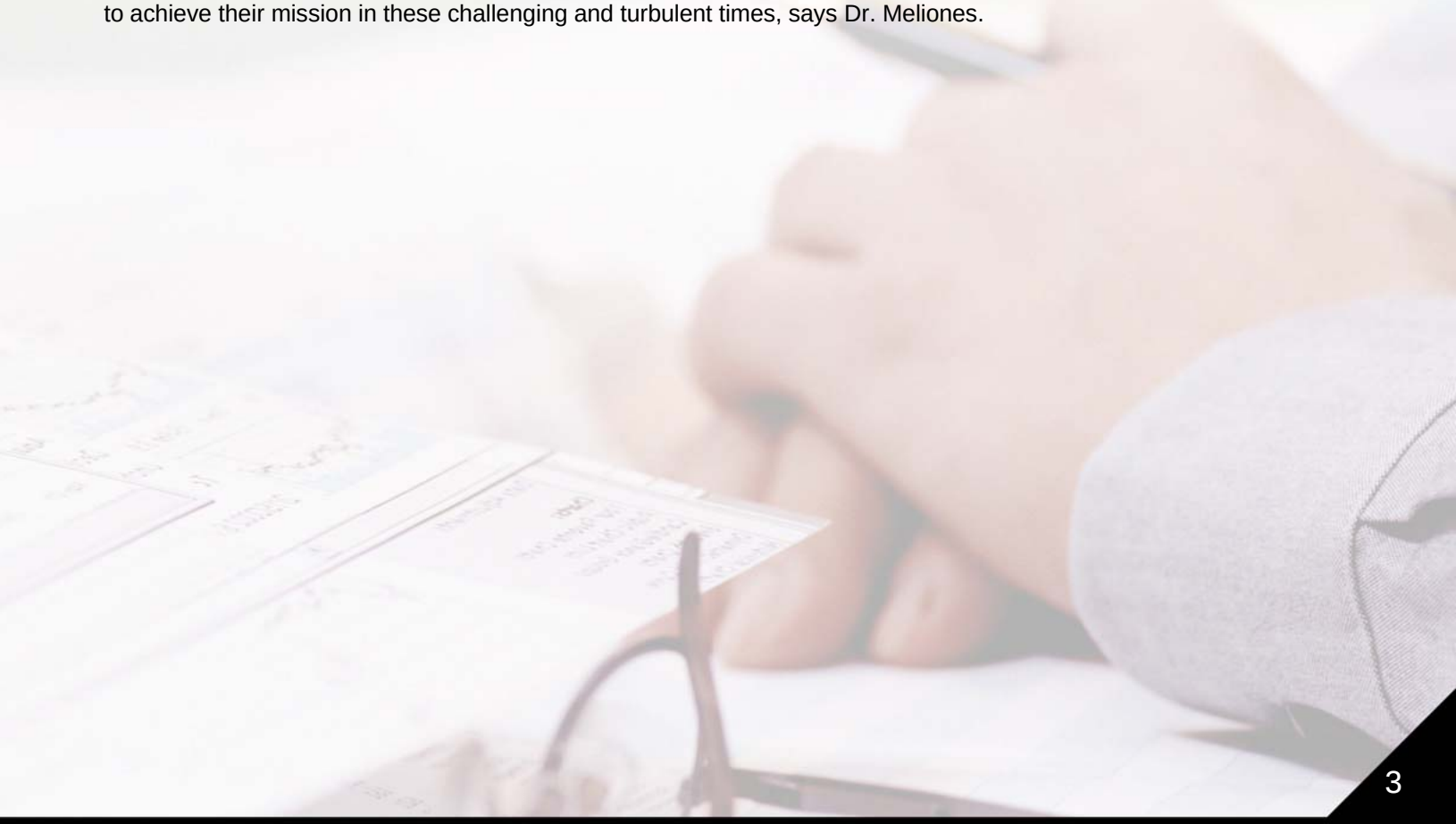
Duke Children's Hospital (DCH) is an in-patient, academic children's hospital with 138 beds and a $150 million/year revenue run rate.

In 1996, DCH was challenged by:

- High cost per case (up 35%)
- High length of stay (15% above target)
- Low staff satisfaction
- $11 million in losses/year due to reductions in federal and managed care reimbursement rates

Duke's Chief Medical Director, Jon Meliones, was faced with a clear choice. He could cut resources (especially staff) and cripple service delivery, severely limiting the hospital's ability to attract patients and medical staff. Or, he could improve the way the hospital managed resources and lessen the cost per case while retaining staff.

Healthcare has a very complex and challenging future. The financial pressures placed on health systems will mount as revenue continues to erode in consequence of the Balanced Budget Act, managed care, and reductions in payment by third-party payers. Costs may continue to rise as hospitals take care of sicker patients in the inpatient setting and compete for a costly labor pool of provider resources that are in short supply. To deal with these challenges, health systems must reorganize themselves in a balanced manner where they enfranchise clinicians as part of the change process. They must also develop comprehensive performance management systems to navigate this complex environment. Only in this way will they be able to achieve their mission in these challenging and turbulent times, says Dr. Meliones.



Duke's Strategic Plan

Duke Children's corporate strategy was twofold: develop a structure to align clinicians and management teams; and implement a performance management system that turns data into information and supports continuous improvement.

In addition, the hospital identified four strategic themes:

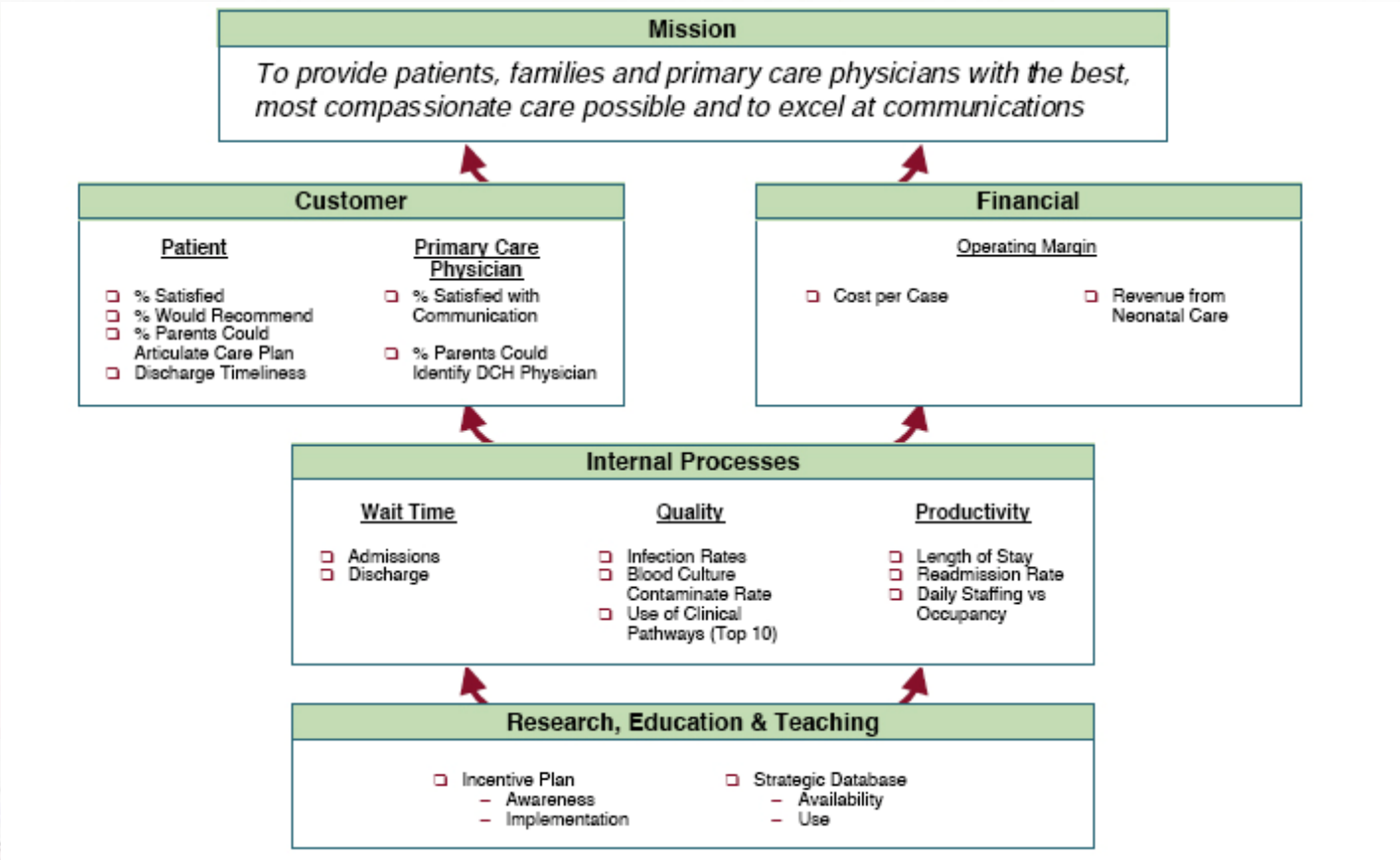
- Build critical mass
- Improve customer services
- Manage cost per case
- Develop systems that support learning, growing, and changing

Balancing Conflicting Goals

The loss of key programs and services at Duke Children's Hospital would have made it difficult both to take care of patients and for the staff to work there. In 1996, Duke's new director, Dr. Jon Meliones, saw a number of issues that he felt a scorecard-based management system could address. First of all, the Balanced Scorecard would clarify for the entire organization which services were the most important to provide. Second, he thought the BSC would promote shared purpose between administration, staff, and physicians and would help alleviate the poor communication and coordination with referring pediatricians that currently existed. Third, Meliones thought the scorecard would help address competitive threats to Duke's market position. The hospital's administration saw the Balanced Scorecard as a framework that would help the institution balance quality care, patient satisfaction, and staff satisfaction with financial objectives.

Duke's Balanced Scorecard

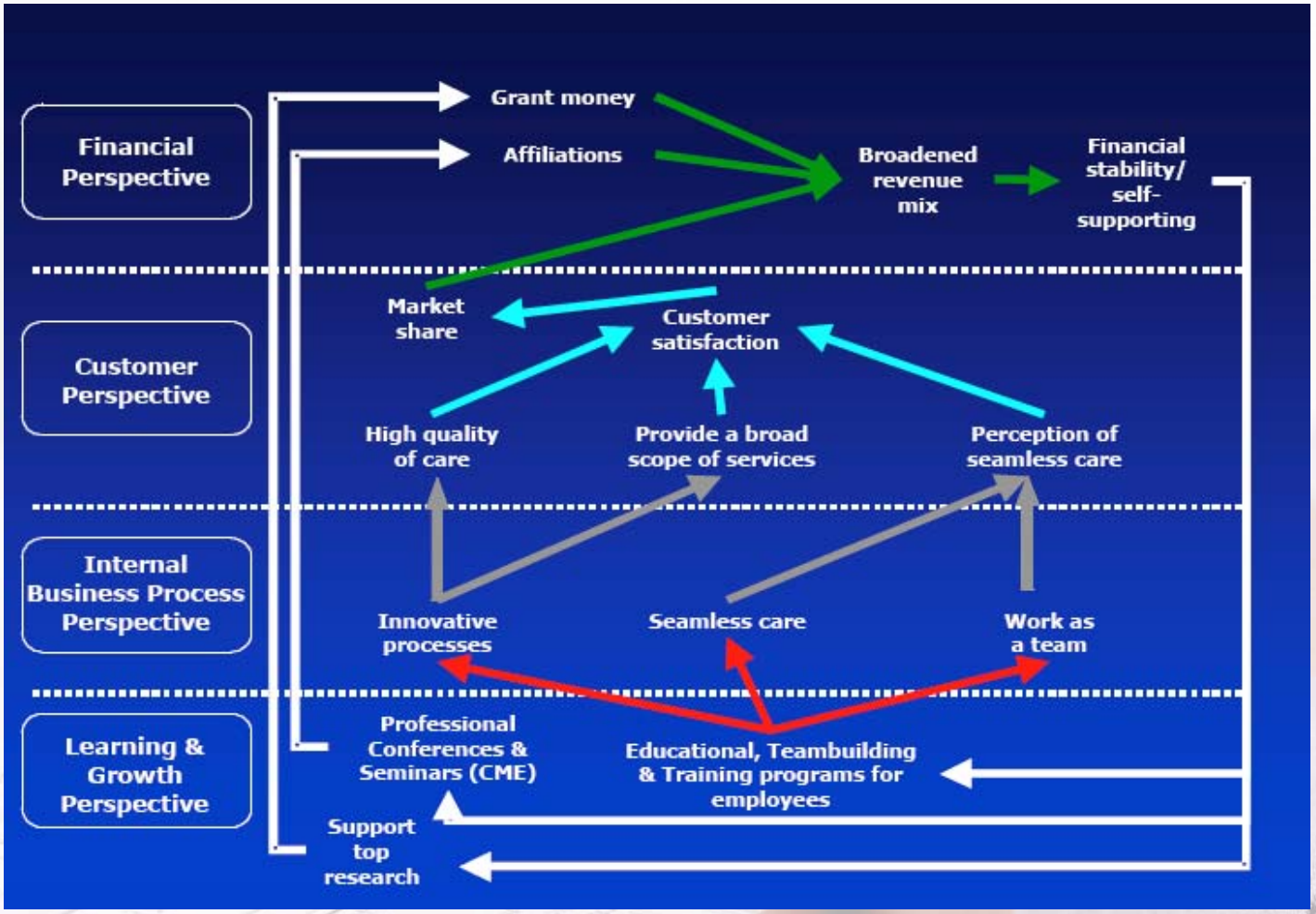
Duke Children's Hospital's Balanced Scorecard embraces a slight revision from the standard four perspectives of the Kaplan and Norton model. Specifically, customer (patient) outcomes rather than financial outcomes, are the highest priority. The latter are seen as supportive of customer-directed initiatives and services. Also, "Learning and Growth" was renamed "Research, Education, and Technology," particularly since Duke Children's is a teaching hospital.



Duke's Strategy Map

Duke Children's Hospital is one of several hospitals embraced by the Duke University Health System. The larger system has also been working within a Balanced Scorecard framework.

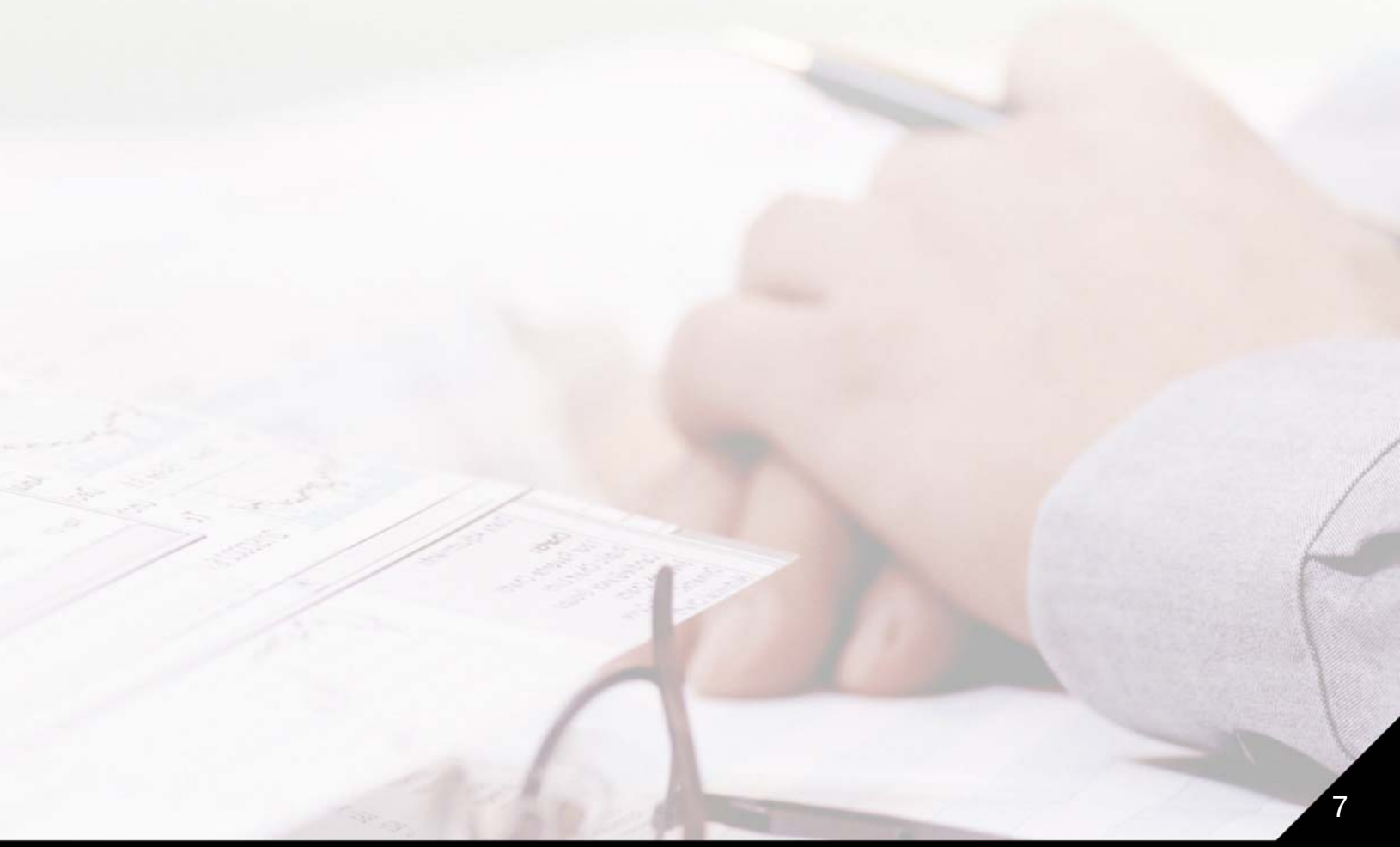
Duke University Health System Strategy Map



Achieving Improved Care *And* Financial Health

Duke Children's Hospital's Balanced Scorecard resulted in statistically significant improvements in all targeted areas:

- Customer (parent) satisfaction increased from 4.3 to 4.7 (scale 1-5), the highest rating among 28 institutions benchmarked Health and Retirement Study Survey
- Cost per case was cut by 33%, yielding $29 million in savings in 3 years
- Length of stay (LOS) was reduced by 31%
- Nursing absentee rate decreased by 42%
- Customer surveys showed more parents were willing to recommend the hospital
- Duke's net margin increased by $15 million



Duke's Balanced Scorecard Exposed Problems and Created Solutions

Although the patients (children) at Duke Children's Hospital received the hospital's care, their representatives in the "customer" role were their parents and referring medical doctors.

A customer strategy was formulated to resolve several key problem areas identified by these groups, including MD complaints that the hospital's lack of communication and coordination of efforts hurt their patients; parent's inability to articulate the plan of care for their children and to identify the physician in charge of their child's case; and complaints about admission and discharge practices.

As part of the data gathering for these problem areas, the employees at Duke Children's were asked to rate their level of satisfaction in relation to the following statements:

- "I feel *involved* with the decisions that are being made with regard to patient care."
- "I receive *recognition* for providing quality patient care."
- "I am encouraged to use my *initiative* to solve problems."

Improvements resulted: teamwork-enhancing initiatives that included staff development of "clinical pathways" (medical care procedures); group participation in "care coordination rounds" (information-sharing sessions); a peer-nominated and elected "Team Member of the Month" Award; and a standardized, systematic communication plan.

"One of the things I like about the [Balanced] Scorecard is that it turns over the rocks," notes Meliones. "Nothing can hide. If you're doing well, you see it; if you need improvement in some areas, you see it as well. You get smarter. It is an essential component of our culture and supports ongoing change."

For example, Balanced Scorecard data led Duke to develop a neonatal intensive care unit in one of its sister institutions. This helped increase the sister hospital's census (and therefore revenue) by 200%. The initiative also helped Duke by increasing its throughput and bed availability. Duke could then accept more neonatal patients as a result of this synergy.

"The scorecard became the methodology that allowed us to communicate to the clinicians about a variety of key clinical issues while still maintaining solid business principles. The scorecard serves as a monitoring tool, a conscience, and learning tool that assists in improving our practice patterns. We look at the scorecard as the evolving brain of the organization," says Meliones.

Duke Children's Hospital first started its scorecard program in the pediatric intensive care unit and shortly thereafter expanded it. Now it encompasses all of Children's Hospital at Duke, from Inpatient to Outpatient. In addition, it is used throughout the rest of the University Health System.

Staying Focused on Long-Term Objectives

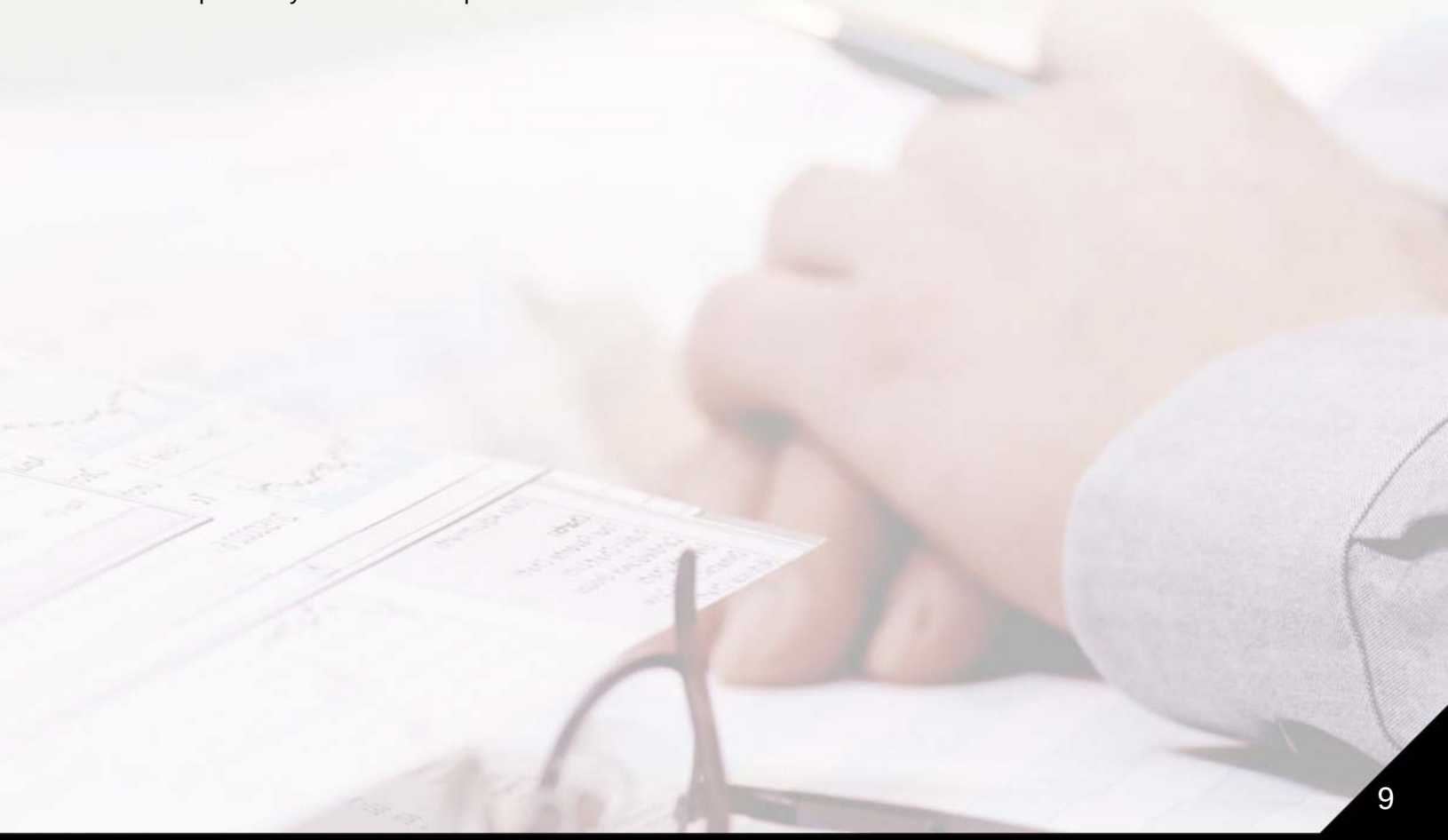
The scorecard keeps Duke focused on its strategy even during major changes--resulting in some innovative solutions. For example, the hospital planned to renovate its intensive care units. During this renovation there would be a significant reduction in available beds. This loss of capacity would reduce both the physicians' and the hospital's revenue. The total loss in revenue was projected to be approximately $2 million. Instead of taking the loss, the hospital identified an area where it could construct a new 12-bed unit that would completely eliminate the revenue lost due to the renovation. At the end of the renovation these beds were to be converted to a lower-cost transitional area, which would help Duke with its long-term capacity issue.

Sharing the Data with Practitioners

Duke Children's Hospital provides its scorecard information to physicians and clinicians on a routine basis, providing global information for all services. The process has proven to be very effective and motivating. Physicians are very interested in the data trends from the previous years as well as comparisons to relevant benchmark data.

The hospital uses this Balanced Scorecard data to drive organizational change. For example, one anesthesiologist had consistently longer operating room times compared to his peers caring for similar patients. Administrators presented the information in a blind fashion to all the anesthesiologists. The individual who had the longest time came forward. He identified why and developed an approach to improve his performance, which consisted of training in a specific isolated task. This individual is now the fastest anesthesiologist in this area.

Says Meliones, “These people have been in the top of their classes all the time. We sliced the data between medicine and surgery, and there's a healthy competition going on as it relates to percentage improvements in cost per case, length of stay, etc. These people are scientists and they will react to the data if it's meaningful and tailored specifically to their clinical practice.”



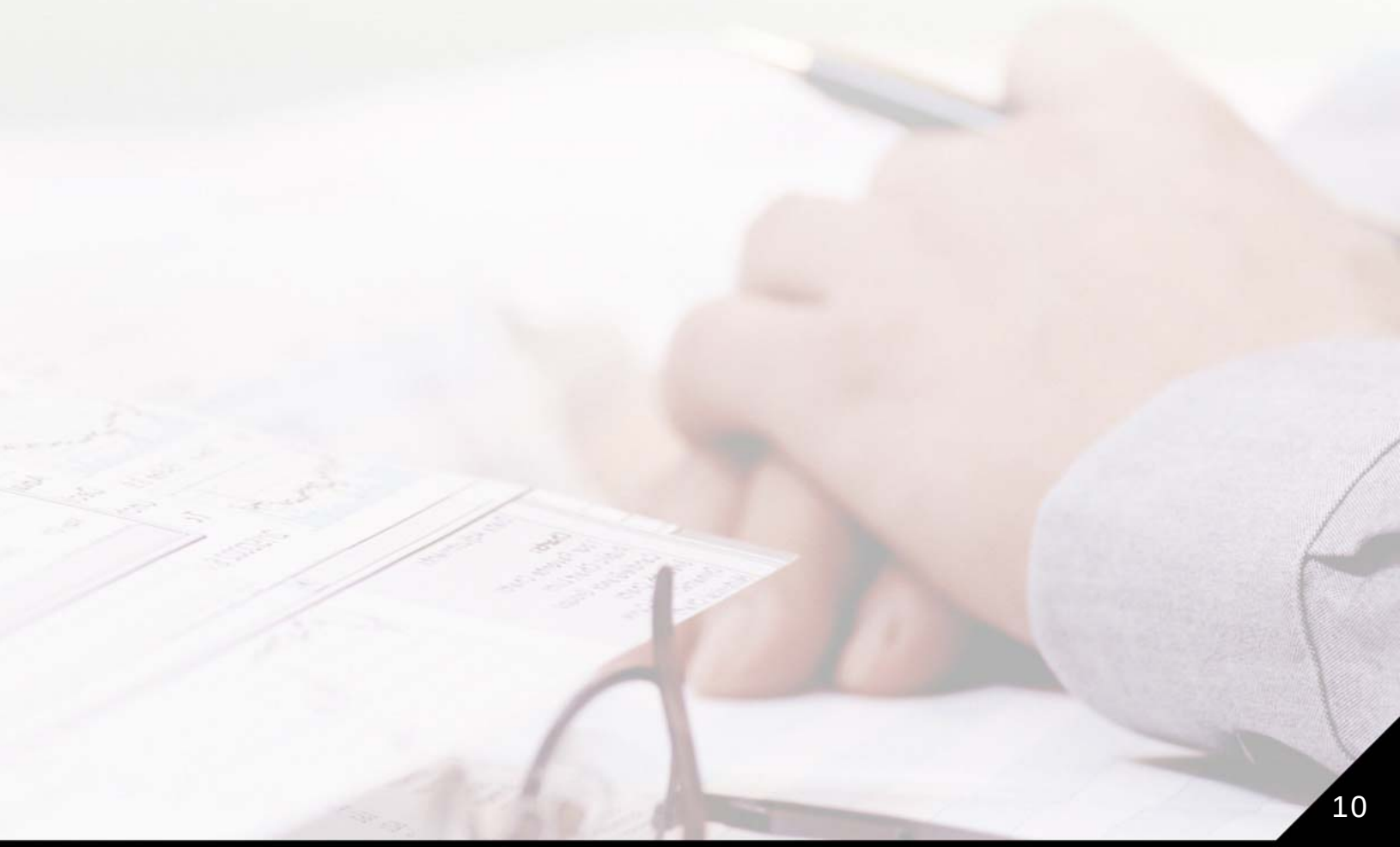
Communication Was Key

Communication was a key component of Duke Children's Hospital's Balanced Scorecard effort. “The biggest thing that one needs to do is communicate and educate. If we can communicate and educate the mission, the vision, the passion, the plan, the results, the initiatives—all of that—then we are going to be successful,” asserts Meliones.

Duke disseminates information in the following ways:

- A quarterly newsletter summarizing statistics that goes to a wide variety of groups.
- Monthly reports specific to individual managers, including middle managers in the nursing organization, that compare their results to the entire institution.
- A “discussion database” on the hospital's internal Web site where information is shared through PowerPoint, Microsoft, and Lotus Notes applications. Employees may pull information from this database for their own presentations.

Administrators at Duke found that when staff didn't get information regularly, there were negative changes to length-of-stay and case costs.



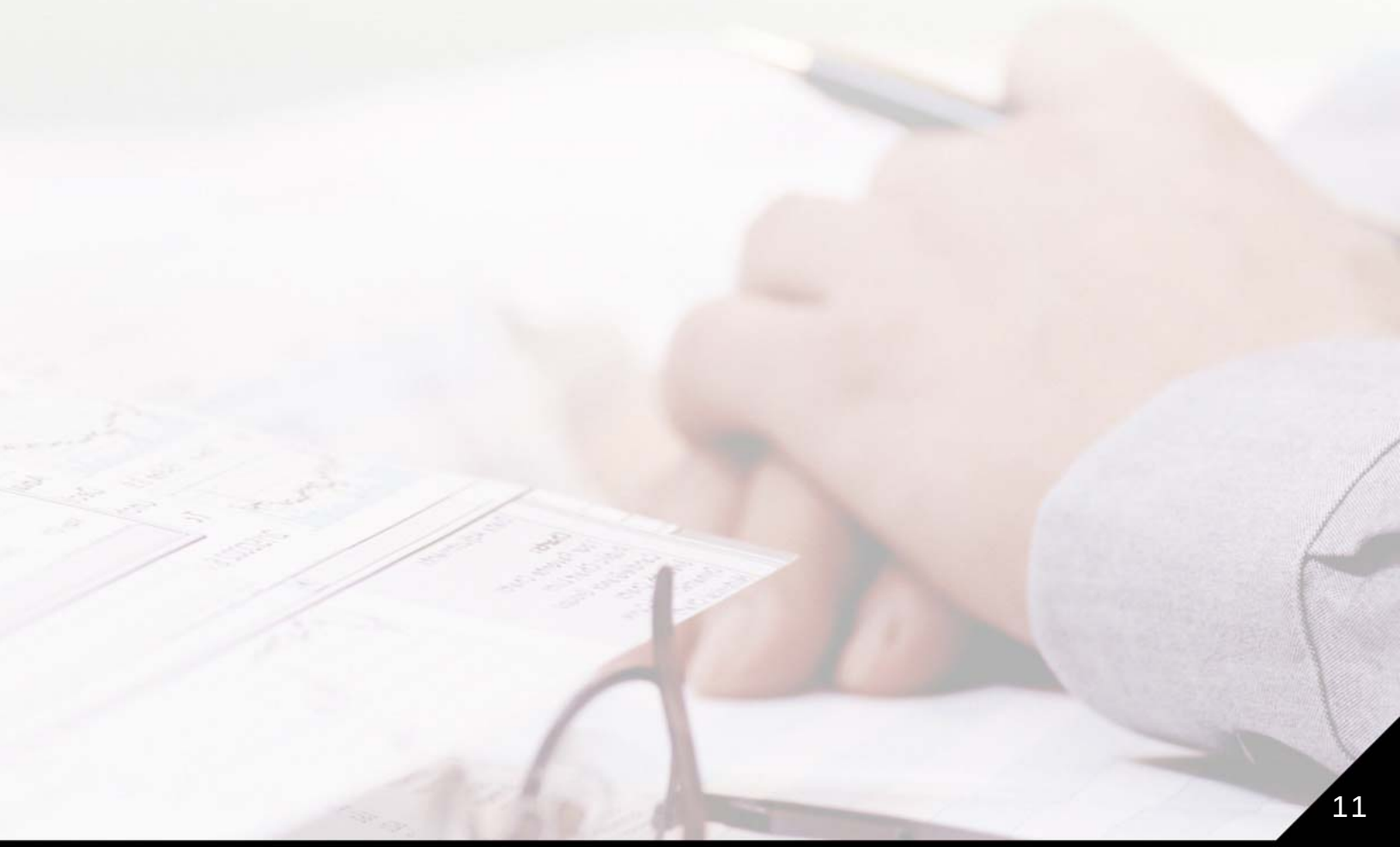
Feedback Systems

Duke Children's Hospital found feedback systems based on the BSC to be particularly valuable. By routinely presenting scorecard information to clinicians and administrators, it was able to motivate all parties to improve its bottom line. Furthermore, the hospital presents global information for all services as well as their specific “report card.”

Duke Children's administrators found that obtaining accurate data was key to improving the hospital's performance. Therefore, they converted all available data themselves in order to obtain a clear picture of individual units. For example, the hospital had a very high pharmacy cost. By examining the data, they found that physicians were using a specific drug more often than medically indicated. By reducing its usage, they were able to cut costs.

Another example of good information leading to lower costs was in the hospital's policy on ultrasounds. The hospital was doing a lot of expensive ultrasound studies. A close examination of the data showed that many babies without relevant problems continued to have the test on a daily basis. “Because there was no ‘stop’ order, the order on the chart just continued,” explained Meliones. The solution was to stop repeating the test on children whose initial ultrasound was normal.

“An example of finding opportunity through better data is our patient satisfaction data that we obtained from Press Ganey, the healthcare survey and evaluation organization. This data is incorporated as part of the scorecard. We noted that many parents were not able to identify their child's daily plan. We solved this by posting a board in the patient's room where we can outline his plan for the day,” said Meliones.



BSCol Hall of Fame

Balanced Scorecard Collaborative Hall of Fame winners have achieved breakthrough performance largely as a result of applying the five principles of a Strategy-Focused Organization: Mobilize Change Through Executive Leadership; Translate the Strategy to Operational Terms; Align the Organization to the Strategy; Make Strategy Everyone's Job; and Make Strategy a Continual Process.

Other selection criteria include: implement the Balanced Scorecard as defined by the Kaplan and Norton methodology; present the case at a public conference; achieve media recognition for the scorecard implementation; produce significant financial or market share gains; and demonstrate measurable achievement of customer objectives. Hall of Fame honorees are nominated by the Collaborative's in-house experts and are personally selected by Balanced Scorecard creators Dr. Robert Kaplan and Dr. David Norton.

Balanced Scorecard Collaborative, Inc.

Balanced Scorecard Collaborative, Inc. (BSCol) is a new kind of professional service firm dedicated to the worldwide awareness, use, enhancement, and integrity of the Balanced Scorecard (BSC) as a value-added management process. Led by Balanced Scorecard creators Drs. Robert Kaplan and David Norton, BSCol provides consulting, conferences, training, publications, action working groups, software certification, and online services. For more information, please call us at 781.259.3737, or visit us on the web where you can join Balanced Scorecard Online for the latest insight and resources at bscol.com.

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