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Walking the Tightrope: Creation of the Physician Scorecard at the Rouge Valley Health System

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INTRODUCTION / GOAL

Using resources efficiently while raising the bar on quality is an ongoing struggle within the healthcare system. Achieving this delicate balance is a key determinant of an organization's ability to meet its strategic direction. Recognizing that individual physician performance drives both cost and quality of care, Rouge Valley Health System, a two-hospital and multi-site organization serving 530,000 residents of east Toronto and west Durham, sought to align physician leadership and accountability with that of the organization through the introduction of the Physician Scorecard.

Creating a quality assessment process, which physicians could believe in and trust was a daunting task for senior physician and hospital leaders. The following case study provides an overview of the Physician Scorecard, including critical success factors for consideration and outlines the outcomes achieved.

PURPOSE

Simply put, the Physician Scorecard is a tool, which confidentially and objectively communicates individual physician performance to each doctor and department chief in order to improve care and lower costs. Performance is measured against several quality and efficiency indicators, which are aligned with the organization's corporate scorecard.

Several hospitals measure physician performance in one way or another, but with the resounding success at Rouge Valley since February 2003, its scorecard could become a more widely used physician measurement and improvement tool. The scorecard is now used as part of the formal annual physician performance appraisal process at Rouge Valley, and, in future, it will be aligned with physician reappointment.

WHY DO IT?

The Physician Scorecard was created from the need and desire to provide performance information to individual physicians, improve the system and maximize funding dollars to the benefit of patients, explained Hume Martin, President and Chief Executive Officer of Rouge Valley Health System. "We thought we needed more of an accountability framework," Martin said. "We compared ourselves with other hospitals and found our cost per case was 8% higher than that of our peers." But the issue is not simply a bottom line matter to control spending. "Getting a handle on costs now will benefit Rouge Valley and its patients for years to come," said Martin. Inefficient spending of healthcare dollars results in fewer resources – including professionals, equipment and facilities – being available to patients, Martin explained. "The Ministry [of Health and Long Term Care] funding formula disadvantages hospitals that have a high cost per case."

In late 2002, Rouge Valley Health System initiated its own operational review to identify cost savings and operational improvement opportunities, as it couldn't sustain its scope, volume and cost of services at its revenue levels. A major component of the identified savings was improving clinical efficiencies, specifically through reducing patients' length-of-stay.

BALANCING ACT

Rouge Valley recognized that achieving and sustaining benchmark length-of-stay performance would require physician leadership and accountability. It also recognized that balancing efficiency with quality of care would be essential and a determinant of the organization's ability to meet its goals and objectives – a tightrope that hospitals must walk to create a sustainable healthcare system. The Physician Scorecard was developed to give doctors the information needed to achieve this delicate balance.

Rouge Valley has shown that improving efficiency in the spending of healthcare dollars has not required a reduction in patient services or quality of care. In fact, the implementation of its Physician Scorecard has facilitated the improvement of both. Readmission rates, for example, have declined with efficiencies achieved in length-of-stay.

KEY TO SUCCESS: PHYSICIAN BUY-IN

Earning the engagement of physicians has been the key to success for Rouge Valley's Physician Scorecard, as physicians are often skeptical about performance data (Rosenstein 2000) because of concerns related to intent, accuracy, physician attribution and relevance.

"If physicians didn't see the value of the new system, it simply wasn't going to work very well," said Dr. Naresh Mohan, Rouge Valley's Chief of Staff. "We wanted a process that would help us see our own performances in an objective and fair system that allowed us to improve patient care and conform to the need to spend healthcare resources more efficiently," said Dr. Mohan.

For the scorecard to become a successful measurement tool, physicians had to take ownership of it and truly get into the game to improve both individual performance

and the system of care. Becher and Chassin (2002) note that if the medical profession is to succeed in any medical quality improvement effort, it must not only take the leading role in improving the quality of care but must also take ownership of all aspects of the problem.

Hume Martin said every such new process or measurement tool requires a driver, that is, an enabler who starts putting elements in place while creating a culture of inclusion among professionals and stakeholders. "Our executive and medical chiefs made this happen by taking leadership roles in their areas, so that the scorecard belonged to everyone – not just the executive." Martin pointed out that the enablers also had to understand not only the professional needs of doctors, but also something about their nature. This sensitivity was important in drawing physicians to the new continuous improvement tool. "Physicians are very data driven, very scientific. So, of course, one of the first challenges we heard from physicians was that our data was wrong," said Martin. "Once the data was refined with physicians' advice, they accepted it and participated in the scorecard process. There have been some anomalies, but overall we have very good, compelling data in each category, which our physicians can work with. For this scorecard to work at any hospital, you've got to have good data to make real improvements and engage your physicians. The quality of the data clearly helped draw them in. But ultimately, it was Rouge Valley's team of physicians who made the scorecard work for their patients and for the efficiency of the hospital system," Martin added.

Sonia Peczeniuk, Rouge Valley's Vice-President of Professional Services and Chief Nursing Executive, said, "The scorecard is very objective and user-friendly. We knew that if we introduced something data-driven that physicians could see their performances improve in, we would have a winning process." Peczeniuk added, "It's no secret that physicians are, by nature, very bright, scientifically trained, competitive and want to improve their individual performances. We worked with the medical leadership to supply Program Chiefs with objective data – so they could give constructive feedback to members of their departments." The use of a benchmarking system with other hospital data also helped give physicians some real targets to strive for in improving their own individual performances.

BUY-IN: WHAT THE PHYSICIANS SAY

Dr. Mohan said, "There is no question that initially the data was viewed skeptically. But with time, physicians have come to accept the validity of the data and the objective commentary on their utilization of resources and their contribution to patient flow. It has led to an increased interest in the development of clinical pathways to achieve or exceed benchmark performance in a number of areas."

Dr. Rosemary Moodie, Program Chief of Rouge Valley's Regional Child and Neonatal Program, said, "Physicians realize they need to be more up-to-date in their measurement tools. That's the climate we are in now." Dr. Moodie said, "What we now have is a tool we can use that is as clear as it can possibly be. The scorecard allows everyone to see if his or her performance is appropriate." Dr. Moodie said that the scorecard is easy to use, which has helped greatly in its acceptance. "Physicians understand it."

Physicians have accepted even more radical aspects of the scorecard because they have been able to use it as a professional tool for themselves, while helping the hospital system become more efficient. "We created a top 10 and bottom 10 listing (see Figure 1). But it was never punitive," said Peczeniuk. Too often measurement tools are seen by physicians as external and punitive (Brennan 2002), which motivated Rouge Valley's team to ensure that the Physician Scorecard was integrated into quality improvement.

Figure 1. Best/Worst Performers
Conservable Days, RVAP Site - Q1, 2004/05

AGE GROUP	(All)
YEAR	2004/05 - Q1
SITE	RVAP
PROGRAM	(All)
CMG	(All)
UNIT	(All)

10 Best Performers

Dr. Name	TTL Cases	TTL Days	T&O Cases	T&O Days	T&O ALOS	T&O Target Days	T&O Target ALOS	Days to Save
Doctor 1	162	1244	138	992	7.19	1185	8.59	-193
Doctor 2	64	297	63	258	4.10	329	5.23	-71
Doctor 3	40	192	37	171	4.62	208	5.63	-37
Doctor 4	18	49	16	45	2.81	73	4.57	-28
Doctor 5	43	316	35	253	7.23	280	7.99	-27
Doctor 6	35	160	35	160	4.57	185	5.28	-25
Doctor 7	23	78	15	56	3.73	80	5.35	-24
Doctor 8	30	132	30	132	4.40	155	5.16	-23
Doctor 9	17	47	8	16	2.00	37	4.61	-21
Doctor 10	9	46	2	4	2.00	20	9.85	-16

10 Worst Performers

Dr. Name	TTL Cases	TTL Days	T&O Cases	T&O Days	T&O ALOS	T&O Target Days	T&O Target ALOS	Days to Save
Doctor 11	159	1460	131	1244	9.50	995	7.60	249
Doctor 12	10	168	7	140	20.00	41	5.79	99
Doctor 13	14	178	14	178	12.71	109	7.81	69
Doctor 14	24	381	23	357	15.52	300	13.04	57
Doctor 15	7	79	7	79	11.29	40	5.67	39
Doctor 16	1	49	1	49	49.00	12	11.70	37
Doctor 17	125	964	110	828	7.53	792	7.20	36
Doctor 18	218	495	205	479	2.34	448	2.19	31
Doctor 19	141	401	138	394	2.86	365	2.64	29
Doctor 20	8	86	7	56	8.00	32	4.51	24

Dr. Fathi Abuzgaya, Chief of Staff from 2001 to 2004, is a key supporter and promoter of the scorecard. He said he was proud to use and model the scorecard to improve his own score and encourage his peers to be involved. "The scorecard allowed me to check my professional performance, within given parametres, and to improve it. For example, I had made the bottom 10 listing in the length-of-stay category. That initiated my

visit to medical records and to pull out the charts. I found that some of my patients, who should have been classified as alternate level of care (ALC), were still logged in as being in acute care, so the scorecard allowed us to focus on data quality issues. It also furthered my interest in minimally invasive orthopaedic surgery in reducing patients' length of stay."

Dr. Abuzgaya added that the scorecard encourages physicians to improve their practices, but it has to be non-punitive for it to work. He has already seen not only his own performance improve, but also that of his colleagues. "Physicians have become more competitive now, but entirely in a good way. We are driving the level of care up one notch with our Physician Scorecard."

CONFIDENTIALITY HELPED

Beyond the engagement and buy-in of physicians, there were several other factors contributing to the success of the scorecard. Rouge Valley received the strong support of the Medical Advisory Committee because it accepted the scorecard as a tool encouraging best practice, safeguarding quality and aligning physician leadership and accountability with corporate strategy.

Confidentiality also helped maintain and grow trust in the scorecard, with rules as to how the information will be shared internally. Initially, the individual scorecards of each physician went only to the medical leads in the departments of medicine, surgery, psychiatry, child health and obstetrics. But the scorecard quickly became so accepted by physicians that the Rouge Valley Medical Advisory Committee approved sharing individual and total results with Program General Managers as well. The scorecard also

- reinforces a culture of education rather than blaming
- profiles good performance, allowing physicians to learn from each other
- ensures and promotes ongoing physician professional development and timely supports for the interpretation of results

WHAT DOES THE PHYSICIAN SCORECARD LOOK LIKE?

The scorecard integrates abstracted health record data into a Microsoft Excel pivot table. The flexibility of the pivot table has been a big plus in the development and use of the scorecard. Data can easily be rolled-up and layered, or drilled-down, so that various users in the organization can look at length-of-stay and quality performance in a variety of categories:

- for the whole corporation
- by hospital site
- by program
- by discharge floor
- by physician
- by case-mix group

The Physician Scorecard (see Figure 2) makes it easy to identify a particular problem area and see where an issue originates.

Figure 2: Physician Scorecard
Q1 – 2004/05

AGE GROUP	(All)
PROGRAM	(All)
YEAR	2004/05 (Q1)
AGE GRP.	(All)
UNIT	(All)
DR. NAME	Dr. Joe Surgery

DEFINITIONS / GLOSSARY

TTL Cases: Total Cases
TTL Days: Total Inpatient Days
T&O Cases: Typical & Outlier Cases
T&O Days: Typical & Outlier Days
T&O ALOS: Typical & Outlier Average Length of Stay
T&O Target Days: T&O Cases * Target for CMG/Age Grp
T&O Target ALOS: T&O Target Days / T&O Cases
Days to Save: T&O Target Days minus T&O Days
PADX %: Post Admit Dx / TTL Cases * 100
Comorb. %: Comorb. Cases / TTL Cases * 100
Mortality %: Deaths / TTL Cases * 100
Infection %: Infection # / TTL Cases * 100
Readmit %: # Readmit < 7 Days / TTL Cases
Outlier Cases: Cases associated w Outlier Days
Outlier Days: Days associated w Outlier Cases

CMGCMG	CMG Description	TTL Cases	TTL Days	T&O Cases	T&O Days	T&O ALOS	T&O Target Days	T&O Target ALOS	Days to Save	PADX %	Comorb. %	Mortality %	Infection %	Readmit %	Outlier Cases	Outlier Days
253	MAJOR INTESTINAL/RECTAL PROC	9	76	8	57	7.13	80	10.04	-23	22.2%	66.7%	11.1%	11.1%	0.0%	0.0%	0.0%
251	GASTROSTOMY & COLOSTOMY PROC	2	24	2	24	12.00	32	16.04	-8	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
281	G.I. HEMORRHAGE	2	6	2	6	3.00	12	5.88	-6	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
258	LAPAROTOMY	2	9	2	9	4.50	14	7.20	-5	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
803	EXTENSIVE PROC INJ/COMPL TRT	1	7	1	7	7.00	12	11.60	-5	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
325	PANCREAS DISEASES (EX MALIG)	1	1	1	1	1.00	5	4.95	-4	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
144	PNEUMOTHORAX	1	1	1	1	1.00	3	3.45	-2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
317	LAPAROSCOPIC CHOLECYSTECTOMY	2	3	2	3	1.50	5	2.65	-2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
290	G.I. OBSTRUCTION	1	3	1	3	3.00	5	5.28	-2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
294	ESOPH/GASTRO/MISC DIGEST DIS	2	5	2	5	2.50	7	3.58	-2	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
704	RED BLOOD CELL DISORDERS	1	5	1	5	5.00	6	6.39	-1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
269	BILAT or CMPLX UNILAT HERNIAS	1	1	1	1	1.00	2	2.35	-1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
505	UROLOGICAL RECONSTR PROCS	1	5	1	5	5.00	5	5.00	0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
521	RENAL FAILURE NO DIALYSIS	1	1	0	0	0.00	0	5.19	0	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
297	OTHER G.I. DIAGNOSES	1	1	0	0	0.00	0	5.40	0	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
900	EXTENSIVE UNRELATED O.R. PROC	1	5	1	5	5.00	5	5.00	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
261	COMPLICATED APPENDECTOMY	6	21	6	21	3.50	20	3.41	1	16.7%	16.7%	0.0%	16.7%	0.0%	0.0%	0.0%
429	TOTAL MASTECTOMY FOR MALIG	1	2	1	2	2.00	1	1.22	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
425	SKIN GRF/WND DB (EX ULC/CELL)	3	8	3	8	2.67	7	2.40	1	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%
329	BILIARY TRACT DISEASE	1	8	1	8	8.00	5	5.41	3	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grand Total		40	192	37	171	4.62	229	6.20	-58	7.5%	42.5%	5.0%	5.0%	2.5%	0.0%	0.0%

BENCHMARKS AND VALUES

"The Physician Scorecard gives them a sense of their performance based on where the industry is going," explained Peczeniuk. The Physician Scorecard shows, by individual doctor, a patient's length-of-stay by case mix group against a peer length-of-stay benchmark. The peer benchmark is based on the best quartile performance by case mix group/age group for 14 selected peer hospitals in Ontario. Rouge Valley's senior administrative team selected the peer hospitals based on size (number of beds, number of patient days/weighted cases), patient profile (acuity, patient service) and whether a hospital was single- or multi-site.

Ken Kuganesan, Rouge Valley's Utilization Coordinator, developed the scorecard's format. He said creating a benchmark tool doctors trusted was the first hurdle to clear. They had to believe in it. "We, as a hospital system, were faced with having to remove

many beds to stay within our budget and no one, including the physicians of course, wanted that. So, if we could reduce the length-of-stay, we could treat more patients within the available funding envelope. It was as simple as that."

Creating a relatively easy document for people to use was also important. The spreadsheet format proved satisfactory in categorizing statistics. "So doctors can see where they stand, and whether they've improved, in any given category, quickly and easily. Then they can talk to their department chief about how to improve," explained Kuganesan. "But the improvements will never be an end in themselves," he added. "As we improve, so does the benchmark. The benchmark is a moving target."

Balancing clinical efficiency with quality of care, the Physician Scorecard also includes several quality indicators such as readmission, infection, mortality, complication and co-morbidity rates. Every quarter the pivot table is updated with Rouge Valley's health record data, extracted from the Med2020 health record system. The reports are printed out for each physician and distributed to the individual physicians as well as to the Program Chief. "After initial planning was done, things started to come together quickly. Once the desired format of the report was determined, the pivot table took about a week to build," said Kuganesan. It takes him two to three hours to update the scorecard every quarter. Clerical support staff in the medical administration department sort and distribute the reports.

RESULTS

Results measured in the first year of the Physician Scorecard include

- decreased length of patients' stay by more than 6,000 days, or 17 beds (see Figure 3)
- increased the number of physicians achieving length-of-stay targets by 18% (see Figure 4)
- reduced readmission rates between 2001/02 and 2003/04
- saved $1.5 million

Figure 3. Conservable Days against Peer LOS Benchmark

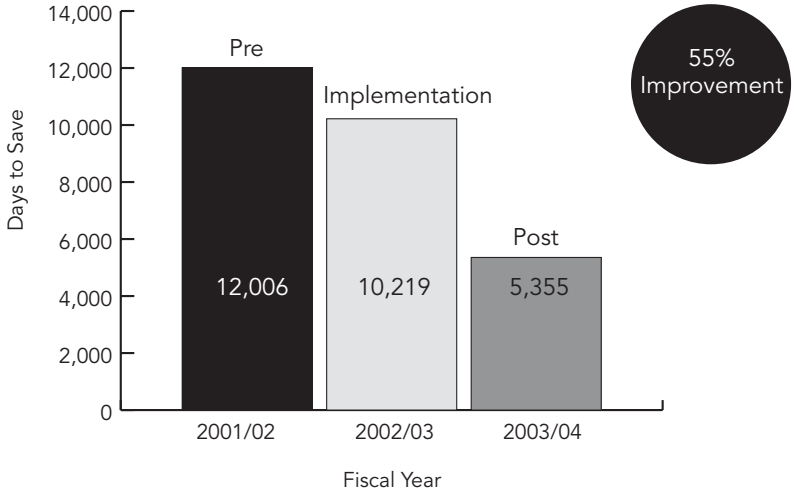
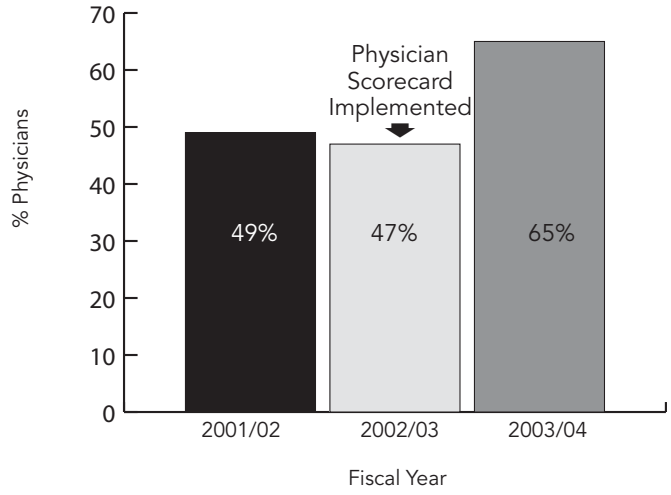


Figure 4. % Physicicans Achieving LOS Targets



- aligned physician accountability with the organization's strategic direction
- expanded awareness and understanding of how physicians impact the system
- renewed dialogue among physicians regarding best practice
- enhanced physician leadership and mentorship opportunities through regular review of the Physician Scorecard with the physician chief or division head
- encouraged physicians to seek clarification of health records data
- boosted outpatient treatment, allowing more patients to return home sooner

NEXT STEPS

The Physician Scorecard has improved patient care while strengthening fiscal and clinical accountability. Next steps in improving utilization of the scorecard include

- refining the process
- establishing a formalized recognition program for top performers
- conducting an annual survey to enable feedback and continuous improvement
- integrating elements of the scorecard in the Medical Administration Quality Reporting process

Rouge Valley's Physician Scorecard will become an increasingly valuable tool as physicians enjoy greater improvements in their performances, satisfying both their professional aims and the hospital system's goal to lower costs and improve patient outcomes. HQ

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