

Performance Strategies

for Healthcare Leaders



Use Healthcare Business Intelligence to Improve Performance

Vol. 3, Issue 11, 2009

Saint Francis Builds Strategy and Success Using Analytics



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To be successful in today's healthcare environment, an organization has to make analytics an integral part of both its financial and clinical operations. That's the approach we've taken at [Saint Francis Hospital and Medical Center](#), one of the largest hospitals in Connecticut and the largest Catholic hospital in New England.

As analytical tools have grown increasingly sophisticated, our ability to link outcomes to performance has brought about real change in our culture. [Healthcare business intelligence](#) isn't just another function of decision support. A part of our strategic vision, it permeates every aspect of our operation. Analytics offers visibility into performance and provides accountability for everyone, from the department clinician to the top executive.

Using Analytics to Create Strategic Plans and the Scorecards to Measure Success

Saint Francis Hospital created strategic plans for each department such as cardiology or cancer and intertwined them with the organization's broader strategic vision. Through analytics, stakeholders have a clear and instant view of how and whether they're meeting their goals. Web-based scorecards provide managers, executive directors and other staff with the ability to drill down to the patient level. This enables us to uncover the root causes of performance shortfalls and adverse trends.

In preparation for rolling out this solution, we worked closely with stakeholders to build key indicators for hospital goals into their individual scorecards. We helped them understand the analytics and how the data would be gathered and interpreted. This helped them identify the information and insights they would need from the scorecard to meet these goals.

The results were tools that are enabling us to not only better manage profitability, but also improve important indicators of care and quality. Although we're still early in this program, we're beginning to see improvements in areas such as:

- Patient Length of Stay
- Quality of Care
- Core Measures
- Costs
- Readmission Rates
- Patient Satisfaction Scores

Using Analytics to Demonstrate Cost Variations in Care

Perhaps the most important development is the creation of a single source of trusted data. Recently we presented cost data to physicians at the [Connecticut Joint Replacement Institute](#) at Saint Francis, a dedicated, comprehensive joint replacement service that performed more than 2,700 joint replacement surgeries in its first year.

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The first reaction to the data presented was that “these costs can’t be accurate.” Over the course of several meetings, we were able to trace costs all the way to the invoice level. We demonstrated how tracking a broad range of expenses revealed the ultimate profitability of operations far better than simply considering total charges.

We delineated the significant differences in costs between surgeons who performed total knee replacements. While most were using complete kits, others were using different pieces from more than one kit, which considerably increased costs.

Accurate and actionable information became a driver for changing behavior and heightening the clinician’s awareness of how they could better impact the hospital’s bottom line. The system revealed considerable differences in costs and the reasons for those variations. Physicians who found themselves out of alignment with the rest of their peers – whether in patient length of stay or cost – didn’t want to be an outlier and made corrections.

Using Analytics to Identify Trusted Partners

We believe that analytics will make Saint Francis more competitive as healthcare reform continues to evolve. We’ve recently launched a program with our case management department that examines and measures readmission rates from skilled nursing facilities.

The data will enable us to make informed judgments about the job these facilities are doing as we search for the best partners to care for our patients. Quality of care and cost are becoming increasingly important as the industry moves inevitably toward bundled payments for care.

Using Analytics to Drive Culture Change and Quality

Building an analytics system that is truly strategic goes far beyond simply installing a few algorithms. We’ve been successful because we had:

- A high level champion who drove the program
- Accurate, audited data
- Collaboration with clinicians

As a result, Saint Francis has undergone major changes in our culture and in our ability to measure and improve performance. Quality of care, as reflected in our Core Measures and HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) scores, are rising. We’ve also seen improvements in the cost of care. With the ability to create highly accurate models for contract negotiations, we’ve gained a strong bargaining position that directly impacts our bottom line. These gains are coming about because we now have insight into the data generated by clinical and financial operations and the ability to use that understanding to build a better healthcare organization.

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Saint Francis Hospital's Scorecard for Hip & Knee Replacements

Measure	Current Month	Previous Month	Current Month	Current YTD	Previous Year	Internal Target	Achievement
	Minus 2	Sep 2009	Oct 2009				
Volume and Financials							
Inpatient Encounters	151	180	↑	2,104	2,460	0.00	↑
Inpatient ALOS	3.07	3.10	↓	3.08	3.19	0.00	↑
Average Net Revenue Per Case	15,311	15,125	↑	15,238	14,566	0.00	↑
Total Cost per Case	13,451	13,134	↑	13,483	14,967	0.00	↑
Overtime % of Paid HRS	0.92	3.67	↓	1.48	1.29	0.00	↑
Unilateral Knee							
Unilateral Knee Cases	88	98	↓	1,189	1,248	0.00	↑
Unilateral Knee ALOS	3.07	3.06	↑	3.10	3.18	0.00	↑
Unilateral Knee Avg Net Revenue per Case	14,964	15,303	↓	15,126	14,347	0.00	↑
Unilateral Knee Total Cost per Case	12,290	13,221	↓	12,815	13,739	0.00	↑
Unilateral Hip							
Unilateral Hip Cases	40	63	↓	725	866	0.00	↑
Unilateral Hip ALOS	2.88	3.06	↓	2.99	3.13	0.00	↑
Unilateral Hip Avg Net Revenue per Case	15,142	14,584	↑	15,135	14,377	0.00	↑
Unilateral Hip Total Cost per Case	13,336	12,974	↑	13,484	15,179	0.00	↑
Safety							
Falls per 1000 Patient Days	2.2	0.0	1.5	3.4	4.7	0.00	↑
Falls with Injury per 1000 Pt Days	0.00	0.00	0.00	0.29	0.37	0.00	↑
Med Events per 1000 Pt Days	2.2	1.6	1.5	2.8	1.6	0.00	↑
Quality							

Saint Francis Hospital uses its healthcare business intelligence solution to track volume and financials for hip and knee replacements. The scorecard enables them to trace costs down to the charge level. The results were presented to physicians to delineate the significant differences in the actual costs among surgeons who performed total knee replacements in comparison to negotiated prices for specific vendors of replacement kits. While most physicians were using complete kits, others were using costly revision kits for the same procedure, considerably increasing costs. Physicians who found themselves out of alignment often made changes.

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