

# Case Study

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# St. John's Regional Health Center: Following Heart Failure Patients After Discharge Avoids Readmissions

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## Vital Signs

Hospital: St. John's Regional Health Center

System: St. John's Health System

Location: Springfield, Mo.

Type: Private, nonprofit hospital

Beds: 866 licensed beds

*Distinction:* Top 3 percent in low readmission rates for heart attack and heart failure patients, among more than 2,800 hospitals eligible for the analysis. Since the time of selection, St. John's has also reduced readmissions for pneumonia care; it now scores well above the top 10 percent of hospitals on this measure.

Timeframe: October 2007 through September 2008. See Appendix A for full methodology.

This case study describes the strategies and factors that appear to contribute to a low readmission rate for patients at St. John's Regional Health Center. It is based on information obtained from interviews with key hospital personnel, publicly available information, and materials provided by the hospital during March through May 2010.



# For more information about this study, please contact:

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### **SUMMARY**

St. John's Regional Health Center (St. John's) has very low readmission rates among patients with heart attacks, heart failure, and pneumonia—the three conditions for which hospitals report readmission rates to the Centers for Medicare and Medicaid Services (CMS). Its rates are better than the top 10 percent of hospitals reporting (Exhibit 1).

St. John's, like other hospitals profiled in this case study series, did not set out deliberately to reduce readmission rates. Rather, the hospital has had a longterm commitment to establishing and adhering to care standards to deliver THE COMMONWEALTH FUND

Exhibit 1. 30-Day Readmission Rates at St. John's Regional Health Center					
Condition	National average	Top 10%	St. John's Regional Health Center		
Heart attack	19.97%	18.40%	17.10%		
Heart failure	24.74%	22.40%	21.30%		
Pneumonia	18.34%	16.50%	15.60%		

Note: All-cause 30-day readmission rates for patients discharged alive to a non–acute care setting with principal diagnosis. Reporting period: Q3 2005 to Q2 2009.

Source: www.whynotthebest.org, accessed September 28, 2010.

optimal care. Staff follow evidence-based practices, educate patients about their conditions during their stay and after discharge, provide coordinated care, and manage chronic diseases by working with providers in the hospital and community.

In addition, St. John's low readmission rates for heart attack and heart failure patients may be attributed to the close attention it pays to patients after discharge and its engagement of the community's primary care physicians. Further, being part of a system and working in partnership with its health plan have influenced how the hospital approaches care coordination and cost-effective care.<sup>1</sup>

This case study focuses on St. John's strategies and efforts to improve heart attack and heart failure care and reduce related readmissions.

### Patient-focused interventions after discharge

- telephone calls to all heart failure patients to answer questions and remind them about the importance of having a follow-up visit with their personal physician;
- referrals to an outpatient cardiac rehabilitation program;
- use of an interactive voice response telemonitoring program for heart failure patients;
- 24-hour nurse triage help line to provide afterhours support;
- medication assistance program for patients with limited resources; and

24- to 48-hour follow-up by a St. John's Health
Plans care manager (for health plan members) to
review discharge instructions, ensure patients have
appointments with their personal physicians, check
medications, and remove any barriers to following
treatment plans.

# Interventions focused on community providers

- telephone and electronic notification to patients' personal physicians about patients' hospitalization and need for follow-up visits within one week;
- "call in, get in" standard of care, in which personal physicians make heart failure patients a priority;
   and
- an electronic heart failure registry to track such patients' care over time.

### **INTERNAL AND EXTERNAL ENVIRONMENT**

### The Hospital

St. John's Regional Health Center in Springfield, Missouri, was founded in 1891 by the Sisters of Mercy as a four-bed hospital. As Springfield and the surrounding communities grew, St. John's expanded to its current campus, which includes an 866-bed hospital and a 150-bed long-term care facility, Mercy Villa. The hospital serves as a tertiary care hospital for the adjacent service area. In fiscal year 2009, St. John's had 32,319 inpatient admissions, 84,394 emergency department visits, and 29,422 surgeries.

The hospital created resource centers to support patients with heart failure, asthma, and diabetes. These resource centers provide education and opportunities for additional consultations to assist patients in managing their chronic conditions. In addition, the hospital maintains disease management programs that monitor and support patients with more extensive health care needs.

# The System

Starting in 1990, St. John's developed a network of rural family practice clinics in southwest Missouri and northern Arkansas. Three years later, it joined with a large regional, multispecialty group practice—which currently has 460 physicians in 70 locations—to form

# WhyNotTheBest.org Readmissions Case Study Series

Nearly one of five elderly patients who is discharged from the hospital in the United States is rehospitalized within 30 days. Evidence suggests that many of these readmissions are avoidable, caused by complications or infections from the initial hospital stay, poorly managed transitions to post-acute care, or recurrence or exacerbation of symptoms of patients' chronic diseases. In addition to taking a physical and emotional toll on patients and their families, avoidable readmissions are extremely costly.

Reducing readmissions has become a priority among health care providers, health plans, government, and other stakeholders. Readmission rates for three clinical areas—heart attack, heart failure, and pneumonia—are collected and publicly reported by the Centers for Medicare and Medicaid Services and other organizations. The risk-adjusted readmission rates show significant variation across hospitals, indicating that some hospitals are more successful than others at addressing the causes of readmissions. This case study is part of a series that highlights best practices among hospitals.

Don't undersell the importance of being an integrated delivery system. We have the luxury of having hospital officials, clinic physicians, and our health plan at the table always.

J. T. Rogers, M.D., Department Chair of Primary Care and Project Director for the Medicare Group Practice Demonstration

St. John's Health System. Since then, a health plans division, home care division, five regional hospitals, and seven pharmacies have been added.<sup>2</sup> The system serves 1.3 million patients in 35 counties in southwest Missouri and northern Arkansas, covering 25,000 square miles.

St. John's implemented electronic health records (EHRs) throughout the system in 2009; the records are accessible to community-based providers and hospital staff. Physicians have readily adopted many of the EHR's embedded tools, including order sets and registries, and use them to place their own orders. Hospital leaders point out that, while having an EHR enhances communication between the hospital and community physicians, it is not essential and their own efforts to reduce readmission rates predate it.

St. John's readmission rates along with its performance on other quality measures related to inpatient and outpatient care are monitored by a subcommittee of the health system board of directors. In addition, both the hospital and health plan review quality indicators, including those related to readmissions. The two parties come together to find solutions and improve quality through their Medical Management Advisory Council.

The health plan, created in 1995, plays an important role in integrating care for St. John's patients. It is the largest plan in the region. Eighty percent of its 300,000 members choose St. John's for their inpatient care, greatly facilitating coordination and making it easier to deliver care that is consistent with standards. Hospital leaders pointed out that when an organization is at financial risk for outpatient care, staff have an even greater incentive to reduce readmissions, reinforcing their desire to "do the right thing."

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At St. John's, having total responsibility for a patient has encouraged physicians to provide a patient-centered continuum of care that extends from the hospital into the community and even into patients' homes.

Both the health plan and the hospitals have disease management programs. Approximately 10,000 to 15,000 Medicare members are in the health plan's National Committee for Quality Assurance–accredited disease management program.

Since 2005, St. John's Health System physician group has been participating in the Medicare Physician Practice Group demonstration, a pay-for-performance program that offers financial rewards or shared savings for improving patient outcomes and achieving efficiencies.<sup>3</sup>

#### The Environment

St. John's is involved in a statewide effort called the Time Critical Diagnosis System, whereby the Missouri Department of Public Health works with health care providers to share and coordinate resources in the treatment of the time-sensitive conditions of trauma, stroke, and ST-segment elevation myocardial infarction (STEMI).<sup>4</sup> The comprehensive effort includes public education, emergency response coordination, and evidence-based care.

# PRIMARY FOCUS ON CLINICAL EXCELLENCE

# Raising Care Standards for Patients with Heart Attacks

Although acute myocardial infarction (heart attack) care at St. John's was consistent with national standards—meeting the Joint Commission standard of 90 minutes from door-to-balloon time—the hospital has sought to streamline the continuum of care from identification of a potential heart attack in the community through the unblocking of the blood vessel in the catheterization lab. Getting patients more quickly into treatment saves heart muscle and may reduce complications that can lead to readmissions.

The hospital is working with its own and other ambulance companies to train emergency personnel in best practices, and to shorten the time it takes to get patients appropriate treatment. St. John's has also worked with the Missouri Department of Public Health to assist community-based responders in delivering care through the Time Critical Diagnosis System, described above. In some cases, ambulances bypass closer hospitals to take high-risk heart attack patients to St. John's, based on its record of success with such patients. Cardiology department staff have been looking at other steps in the care process. Recently they changed the type of stent being used to unblock arteries, which has also improved outcomes.

### **CARE TRANSITION STRATEGIES**

## **Targeting Heart Failure Patients**

Before CMS began publishing data on heart failure care processes, St. John's had taken an active approach to improving heart failure care by tailoring medications, discharge planning, and enrolling patients in a cardiac rehabilitation program for management of the condition.

In the late 1990s, the hospital established a Heart Failure Committee in recognition of its high prevalence in the community, as well as its high costs. The committee began by examining a sample of heart failure readmissions to determine their primary causes. Though they found no single dominant cause of readmissions, they did find evidence of medication and dietary noncompliance. In an effort to better coordinate care between inpatient and outpatient providers, the reviewers' findings were conveyed to patients' personal physicians by letter, along with information about ambulatory services available for heart failure patients. A registry system was created to track quality measures for these patients, based on diagnosis and laboratory codes as well as manual entries. In another mainstay of the early program, heart failure patients were called after discharge to remind them to follow up with their physicians and answer their questions. After these strategies were implemented, readmission

rates among heart failure patients dropped by nearly half, from over 7 percent in 1998 to 4 percent in 2001.<sup>5</sup>

At its inception, the Heart Failure Committee was chaired by the medical director of the Cardiac Rehabilitation program, a practicing cardiologist and physician leader. Early members also included a representative of the quality department, an internist, a family practice physician, a cardiologist, and the cardiac nursing director. The committee later expanded to include clinical nurses, cardiac rehabilitation nurses, a pharmacist, a dietician, a case manager, and a social worker. Physicians' experiences in the Medicare Physician Group Practice demonstration led them to include other physicians, social workers, and case managers as well as disease management, data management, and clinic management staff on the committee.

# **Patient Education and Engagement**

Heart failure patients receive enhanced discharge planning. They are assessed by nurses at the time of admission to determine the availability of family, health insurance, and other supports that are important to their recovery and stabilization at home. The assessment includes a review of any services provided in the home prior to admission. This information is documented in the EHR and included in the Discharge Planning Assessment flow sheet used by case managers. In-home services may be arranged, if necessary. Since St. John's serves a large number of indigent people in the Springfield region, the hospital created a medication assistance program to help patients gain access to prescriptions, such as ACE inhibitors or diuretic therapy.

Before heart failure patients leave the hospital, St. John's staff teach them about their condition, when they should reach out for help, and the importance of follow-up care. Patients leave the hospital with a book, reminder magnets for their refrigerator, and other literature. Each patient is assigned a contact person who can answer questions or communicate with their physicians on their behalf during the day. In addition, a 24-hour nurse triage line is available.

# Post-Discharge Follow-Up of Heart Failure Patients

St. John's has used a patient registry since about 2000 to track all heart failure patients after they leave the hospital. Inclusion in the registry prompts contact from a patient's primary care physician and generates standing orders for a bundle of services, including cardiac rehabilitation. An inpatient cardiac rehabilitation educator works with all heart failure patients prior to discharge to prepare them for the transition to the community. They are then referred to the outpatient Heart Failure follow-up program for follow-up after discharge. The only patients who are not referred for continued follow-up are those who are discharged to a nursing facility or hospice, on dialysis, or refuse the program.

Hospital leaders point out the importance of tracking all heart failure patients, not just the highest-risk individuals. By teaching all patients to know when they are "getting into trouble," as well as where to turn for help, they believe they are keeping patients healthier.

Using an interactive voice response (IVR) telemonitoring program, heart failure patients are able to report their health status from home. Patients call in every day with their weight, blood pressure, and answer simply yes or no to questions about increased shortness of breath, swelling, orthopnea and dizziness. St. John's heart failure nurses monitor this information; when an abnormal weight or vital sign is reported, or a yes to symptoms, the IVR system alerts them to call the patient. The nurse will then triage the patient, confirm the problem, counsel the patient, and may require him or her to talk to or schedule an appointment with their physician, as appropriate. Patients who do not wish to participate in the IVR program are followed by outbound follow-up phone calls at varying intervals until stable, and able to self-manage.

In addition to having access to the services provided by St. John's Regional Health Center, all Medicare Advantage members of St. John's Health Plans are contacted within 24 to 48 hours

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after discharge by a care manager, regardless of which hospital they were discharged from. The care manager reviews patients' discharge instructions and educational materials and checks to ensure they have appointments with their primary care physicians and are taking the right medications. The care manager also will seek to identify and address any barriers that prevent members from following their treatment plans.

## **Collaborating with Community Providers**

In 2005, the hospital's cardiology department sponsored a heart failure summit and invited all primary care physicians in the community to attend the half-day educational meeting. The summit was used to bring physicians up to date on the current guidelines for heart failure treatment.

The hospital notifies primary care physicians when their patients are discharged so that follow-up appointments can be scheduled within a week. This communication occurs via the hospital's EHR system. The patient is also added to the hospital's heart failure registry, which includes real-time quality measures and reports for clinicians and management as well as a Visit Planner tool.<sup>6</sup> The Visit Planner, developed as part of the hospital's participation in the Medicare Physician Group Practice demonstration, is a summary "to do" list for community physicians to reference prior to each visit. The Visit Planner is populated from the registry and highlights key demographic and clinical data, as well as needed tests and interventions. The registry also generates an exception list identifying patients who have gaps in care; physicians then call or send letters to patients who are overdue for needed tests. Since 2009, the registry has been linked to the EHR and expanded to include patients with chronic conditions other than heart failure that are believed to contribute to unnecessary hospitalizations.

In addition, community physicians who participate in the demonstration are eligible to receive financial rewards for achieving clinical outcomes for heart failure and four other conditions, as well as meeting certain goals for finances, customer service, materials management, and pharmaceutical outcomes.<sup>7</sup> These

incentives, in combination with the registry's ability to provide real-time feedback on their performance, help keep physicians engaged in efforts to strengthen the continuum of heart failure care.

At St. John's urging, primary care physicians have adopted strategies to provide timely access to ambulatory care—what the hospital describes as a "call in, get in" standard. If a patient with heart failure, as identified by the heart failure registry, calls his or her physician, the physician makes it a priority to discuss their symptoms over the phone or see the patient, as appropriate. According to J. T. Rogers, M.D., the department chair of primary care and project director for the Medicare Physician Group Practice demonstration, the key to the success of the policy has been freeing office staff from past protocols, enabling them to insert heart failure patients into physicians' schedules.

#### **RESULTS**

St. John's is among the best hospitals in the nation in terms of low readmission rates among patients with acute myocardial infarction or heart failure, based on the selection criteria described in Appendix A. According to the hospital's reports, its early performance improvement efforts reduced readmissions among heart failure patients by about 50 percent from 1998 to 2001. The interventions described in this case study are credited with further improvements over the last decade, though trend data are not available.

Appendix B shows St. John's performance on the process-of-care "core" measures, patient experience measures, mortality rates, and readmission rates reported on WhyNotTheBest.org, compared with national averages and the top 10 percent of hospitals. On most of these process-of-care and patient experience measures, St. John's performs above the national average. Surprisingly, St. John's score for documentation of heart failure discharge instructions is one of its lowest—a problem hospital staff attribute to physicians' failure to document contraindications to treatment in the newly implemented EHR. A prompt reminding physicians to document contraindications was recently built into the tool.

St. John's also performed well in the Medicare Physician Group Practice demonstration that ran from 2005 to 2010 and promised financial rewards to groups that could meet quality and efficiency standards. CMS selected indicators for three specific diseases—diabetes, heart failure, and coronary artery disease—and also for preventive care. At St. John's, collaboration between physicians, hospital administrators, and staff led to improvements such as implementation of a patient registry, a checklist for patient visits, and a case manager who worked on transitions from hospital to outpatient care. St. John's was one of two hospitals to meet all 10 quality benchmarks the first year (all related to diabetes), all 27 the second year, and 31 out of 32 by the fourth year. In addition, the hospital shared in the financial rewards of having improved quality and lowered costs.8

#### **LESSONS**

St. John's experience yields lessons that may help other hospitals seeking to lower their readmission rates.

# Involve all patients in managing their conditions through education and follow-up.

Patients play a critical role in successfully managing chronic conditions and recovering from acute episodes of illness. Teaching them how to manage their conditions prepares them to be partners in their care and their own best advocate. St. John's educates all heart failure patients—not just the most severely ill—in an effort to intervene early and reduce future needs for inpatient care.

# Support the delivery of evidence-based care from committed providers.

Hospitals can encourage the delivery of evidencebased care by educating, monitoring, supporting, and providing feedback to clinicians. St. John's does so by working with community providers on early recognition and prompt treatment of heart failure patients. The hospital monitors adherence by hospital and community providers to evidenced-based practices during management meetings and provides feedback to clinicians in real time. Tools embedded in the EHR support clinicians in delivering evidence-based care.

# An integrated system brings everyone to the table.

Rogers' advice to other hospitals is, "Don't undersell the importance of being an integrated delivery system. We have the luxury of having hospital officials, clinic physicians, and our health plan at the table always." St. John's hospital and health plans have collaborated on a number of quality initiatives and combined efforts to manage patients' care over time.

The shared electronic health record system has been an additional resource. However, even hospitals that do not have such a system can make progress, as shown by St. John's early success in reducing heart failure readmissions by nearly half.

# Incentives reinforce providers' efforts to "do the right thing."

At St. John's, financial incentives included as part of the Medicare Physician Group Practice demonstration have been effective in promoting improvement.

Physicians who achieve agreed-upon standards on 32 measures related to heart failure, cardiovascular disease, diabetes, and preventive screenings are eligible for individual financial rewards. At the hospital and system levels, St. John's involvement in the demonstration has encouraged administrators to align policies with quality objectives in order to achieve financial gains. Leaders believe that targeted incentives will help inpatient and outpatient providers go further in integrating patient care.

While low readmission rates may in the short term result in lost revenues, hospital leaders note that lower rates provide managers with an excellent sales pitch when negotiating with payers.

#### FOR MORE INFORMATION

For more information, contact Donna Smith, R.N., B.S.N., director, medical management business development, at Donna.Smith@Mercy.Net, or Debra Appleby, B.S.N., director of quality resources, at Debra.Appleby@Mercy.Net.

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### Notes

- Since the time of writing this case study, Mercy Health Plans was acquired by Coventry Health Care. However, the system remains equipped to take on full risk for self-insured contracts with case management, utilization management, disease management, a 24-hour nurse line, and other capabilities.
- <sup>2</sup> St. John's Web site, http://www.stjohns.com.
- of the Medicare, Medicaid, and SCHIP Benefits
  Improvement and Protection Act of 2000, CMS
  rewards 10 physician groups through shared savings
  related to improving patient outcomes by proactively coordinating their patients' total health care
  needs, particularly for those with chronic illness,
  multiple comorbidities, and transitioning care settings. For more information see http://www.cms.
  gov/DemoProjectsEvalRpts/downloads/PGP\_Fact\_
  Sheet.pdf.
- The Missouri Department of Health and Senior Services, Time Critical Diagnosis System Detail, available at http://www.dhss.mo.gov/TCD\_System/ systemdetail.html.

- The hospital-reported rate is based on a different definition of readmission than is used in the data reported to CMS and shown in Appendix B. CMS defines a readmission as any readmission within 30 days of discharge, while the hospital applied a shorter time frame and included only readmissions due to the same diagnosis as the previous admission. Using the hospital's definition of readmission, the hospital showed a 50 percent decrease in the readmission rate, resulting in a lower overall rate.
- 6 U.S. Secretary of Health and Human Services, 2009 Report to Congress: Medicare Physician Group Practice Demonstration Evaluation Report, available at http://www.cms.gov/DemoProjectsEvalRpts/downloads/PGP\_RTC\_Sept.pdf.
- Centers for Medicare and Medicaid Services, St. John's Health System Physician Group Practice Demonstration: Site Visit Final Report (July 2006).
- <sup>8</sup> According to interviews with St. John's staff.

### Appendix A. Selection Methodology

The primary selection criterion for case studies of high-performing hospitals in readmissions was: the hospital was in the top 3 percent of hospitals with 50+ beds in terms of lowest readmissions for at least two of three clinical areas (heart attack, heart failure, and pneumonia).

The calculations were based on data reported on the CMS Hospital Compare Web site and The Commonwealth Fund's WhyNotTheBest.org Web site. Readmission rates are based on Medicare patients readmitted to a hospital within 30 days of discharge from a previous hospital stay for heart attack, heart failure, or pneumonia. Readmission rates used for selection were based on the October 2007 through September 2008 period.

According to the CMS Hospital Compare site:

- The three readmission models estimate hospital-specific, risk-standardized, all-cause 30-day readmission rates for patients discharged alive to a non–acute care setting with a principal diagnosis of heart attack, heart failure, or pneumonia. For each condition, the risk-standardized ("adjusted" or "risk-adjusted") hospital readmission rate can be used to compare performance across hospitals. The readmission measures for heart attack, heart failure, and pneumonia have been endorsed by the National Quality Forum (NQF).
- For each of the three principal discharge diagnoses (heart attack, heart failure, and pneumonia), the model includes admissions to all short-stay acute-care hospitals for people age 65 years or older who are enrolled in Original Medicare (traditional fee-for-service Medicare) and who have a complete claims history for 12 months prior to admission.

For more information see the CMS Hospital Compare Web site.

While low readmission rate was the primary criterion for selection in this series, the hospitals also had to meet the following criteria: ranked within the top half of hospitals in the U.S. on a composite of Hospital Quality Alliance process-of-care measures and in the percentage of survey respondents giving a 9 or 10 rating of overall hospital care, as reported in the Hospital Consumer Assessment of Healthcare Providers and Systems to CMS; full accreditation by the Joint Commission; not an outlier in heart attack, heart failure, and/or pneumonia mortality as reported by CMS; no major recent violations or sanctions; and geographic diversity.

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Appendix B. Performance Data from WhyNotTheBest.org for St. John's Regional Health Center

	Top 10% of U.S. hospitals	National average	St John's Regional Health Center
Overall Recommended Care	98.10%	95.14%	94.39%
Overall Heart Attack Care	99.72%	97.11%	98.50%
Aspirin on arrival	100.00%	98.10%	100.00%
Patients given aspirin at discharge	100.00%	97.68%	99.00%
ACEI or ARB for LVSD	100.00%	95.56%	93.33%
Adult smoking cessation advice/counseling	100.00%	99.39%	97.92%
Beta-blocker prescribed at discharge	100.00%	97.76%	98.96%
Fibrinolytic therapy received within 30 minutes of hospital arrival	87.10%	74.47%	N/A
Primary PCI received within 90 minutes of hospital arrival	97.78%	88.54%	95.45%
Legacy: Beta-blocker on arrival	N/A	89.00%	96.82%
Overall Pneumonia Care	98.03%	92.42%	93.25%
Pneumococcal vaccination	100.00%	90.84%	93.03%
Blood cultures performed in the emergency department prior to initial antibiotic received in hospital	99.28%	94.48%	91.09%
Adult smoking cessation advice/counseling	100.00%	97.35%	94.74%
Given initial antibiotic(s) within 6 hours after arrival	99.26%	94.61%	96.12%
Initial antibiotic selection for community-acquired pneumonia (CAP) in immunocompetent patients	97.73%	90.69%	91.82%
Influenza vaccination	100.00%	89.94%	90.91%
Legacy: Pneumonia patients given initial antibiotic(s) within 4 hours after arrival	N/A	81.00%	87.95%
Legacy: Pneumonia patients given oxygenation assessment	N/A	99.00%	100.00%
Overall Heart Failure Care	98.96%	91.19%	91.52%
Discharge instructions	99.08%	85.45%	78.96%
Evaluation of LVS function	100.00%	95.38%	98.96%
ACEI or ARB for LVSD	100.00%	93.84%	96.17%
Adult smoking cessation advice/counseling	100.00%	98.78%	96.34%
Overall Surgical Care	98.41%	94.67%	93.75%
Presurgical antibiotic given at the right time	99.11%	95.08%	95.93%
Surgical patients who were given the right kind of antibiotic	100.00%	96.92%	97.02%
Preventive antibiotics stopped at right time	98.13%	92.30%	89.96%
Cardiac surgery patients with controlled 6 a.m. postoperative blood glucose	98.39%	92.05%	88.24%
Surgery patients with appropriate hair removal	100.00%	98.79%	100.00%
Surgery patients with recommended venous thromboembolism prophylaxis ordered	99.14%	92.34%	90.26%
Surgery patients who received appropriate venous thromboembolism prophylaxis within 24 hours prior to surgery to 24 hours after surgery	98.57%	90.44%	87.01%
Surgery patients on a beta blocker prior to arrival who received a beta blocker during the perioperative period	100.00%	90.80%	80.82%

	Top 10% of U.S. hospitals	National average	St John's Regional Health Centei
Patient Experience (HCAHPS)—Rating 9 or 10			
Percent of patients highly satisfied	78.00%	66.19%	79.00%
Doctors always communicated well	87.00%	79.99%	83.00%
Nurses always communicated well	83.00%	75.22%	81.00%
Patients always received help as soon as they wanted	75.00%	63.23%	67.00%
Staff always explained about medicines	68.00%	59.57%	66.00%
Pain was always well controlled	76.00%	68.82%	72.00%
Patient's room always kept quiet at night	71.00%	57.38%	57.00%
Patient's room and bathroom always kept clean	81.00%	70.35%	78.00%
Patient given information about recovery at home	87.00%	81.12%	85.00%
Patient would definitely recommend this hospital to friends and family	81.00%	68.67%	84.00%
Readmission			
30-day readmission rate for heart attack	18.40%	19.97%	17.10%
30-day readmission rate for heart failure	22.40%	24.73%	21.30%
30-day readmission rate for pneumonia	16.50%	18.34%	15.60%
Mortality			
30-day mortality rate for heart attack	14.10%	16.17%	15.20%
30-day mortality rate for heart failure	9.40%	11.28%	11.40%
30-day mortality rate for pneumonia	9.50%	11.68%	13.10%

Source: WhyNotTheBest.org, accessed January 6, 2011.

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The aim of Commonwealth Fund–sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions' experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.

