HEALTHTRUST℠
inSight Advisory℠

How a Community Hospital Improved Heart Attack Outcomes while Reducing Costs to Outperform Most Hospitals in the Country

"HealthTrust and our cardiovascular team worked together to understand and address the underlying reasons driving our clinical outcomes. By identifying high risk AMI patients and deploying evidence-based practices and toolkits, our program is now recognized as a best practice for quality and cost containment."

Ron Spencer
RN, administrative director, cardiovascular and endoscopy service lines

Client:

Bon Secours St. Francis Health System, St. Francis - Downtown Greenville, South Carolina. 245-bed acute care hospital.

Specialties:

Emergency Room, Heart Care, Heart Surgery, Inpatient Cancer Services, Bone Marrow Transplantation Center, Orthopedic Surgery, Osteoporotic Fracture Program, Spine Surgery, Neurosurgery, Radiology and Imaging, Sleep Center, Outpatient Surgery, Laboratory Services.

Background:

Due to the latest CMS bundled payment mandates for heart attacks and bypass surgeries, St. Francis needed ways to improve patient outcomes and at the same time lower cost effectiveness.

Problem:

St. Francis Hospital had higher than the national averages rates of mortality, complications and readmissions for acute myocardial infarction (AMI) episodes. Complications were associated with patients' reactions to the contrast agents used in the cath lab and in severe cases, patients developed contrast-induced nephropathy (CIN), a condition carrying significantly higher risk of injury and death. In addition, many providers who referred and/or performed contrast procedures were not fully informed about these risks of CIN.

HEALTHTRUST℠
inSight Advisory℠

April Simon, RN, MSN, assistant vice president clinical data and analytics, has more than 20 years of hospital-based cardiac, nursing and administrative experience with cardiac programs. She works with the American College of Cardiology and the Accreditation for Cardiovascular Excellence, has contributed to numerous publications and was one of the first Certified Critical Care RNs whose practice was based in a cath lab.

Our Approach:

St. Francis needed to set ambitious goals to improve AMI outcomes. They sought opportunities to identify new protocols aimed at:

- Rapidly identifying and determining risk of heart attack patients.
- Providing timely notification and utilization of interventional procedures.
- Managing AMI patients with other significant comorbid conditions that can affect clinical outcomes. For example, an AMI patient who's a diabetic will often have significant kidney disease; use of contrast material in diagnosing and treating AMI can introduce stress to the kidneys; impaired renal function and contrast-induced nephrology, carry significantly higher risk of death.

First, a quality team, led by medical director Chris Smith, MD, was put together to address these issues. The team developed solutions to ensure rapid identification of AMI patients in the emergency department and the education of cardiologists and nursing staff about the risks associated with radiographic contrast materials.

Next, clinical data and analytics InSight Advisor April Simon, RN, MSN, led team efforts instilling best practices to improve cardiac outcomes. The guided team introduced an evidence-based algorithm for rapid identification of AMI patients, a contrast-induced nephropathy (CIN) toolkit, and data interpretation to guide team efforts. This helped implement future evidence-based CIN and cardio toolkits.

Results and Benefits:

Working together, the team was able to improve heart attack outcomes and reduce patients' risk for acute kidney injury from contrast-induced nephropathy. Their efforts also allowed the community hospital to outperform most hospitals around the country in the following measured outcomes:

Reduced door-to-balloon times to 33 minutes by using evidence-based toolkits to treat patients faster.

Drove down costs on treatment of renal failure from $300,000 in 2014 to less than $30,000 now.

Reduced the complications rates from the occurrence of acute renal failure from the benchmark of 6% down to 2%.

Saw a **3% drop in readmissions**, putting it below the national benchmark.

Saved 28 more lives than the "average" hospital over a three-year period.

To evaluate your care delivery processes, identify improvement opportunities and implement physician-approved clinical protocols, contact the inSight Advisory℠ Clinical Performance team today at **615.344.3000** or email **hpgsvc@healthtrustpg.com**.