Baptist Health System (BHS) fulfills a vital public service in central Alabama. The four-hospital network serves the cities of Birmingham, Alabaster, Talladega, and Jasper, providing a full range of medical care from obstetrics to oncology. The Princeton facility is the largest, with 499 beds, and the other three hospitals (Shelby, Walker, and Citizens) range from 50 to over 200 beds. Combined, this four-hospital system experiences over 300,000 adjusted patient days per year.

The Crothall Laundry Services facility in Rome, Georgia, has supplied linen to BHS since January 2004 and began providing laundry distribution services in 2006. It quickly became clear that BHS needed Crothall’s expertise not only in the area of processing linens, but also in assisting BHS with improving linen utilization.

DEFINING NEW GOALS
Linen utilization is a near-invisible budget item, but it can painfully pinch already tight budgets. "For years, we went over linen costs with our CFO," remembered BHS Vice President of Supply Chains Michael Louviere. "He was continually asking me, ‘Why can’t you manage this?’"

In the summer of 2009, Louviere and the materials managers at each of the hospitals decided to tackle the problem. Their Lean Initiatives Committee began looking at linen utilization and setting targets.

According to Justin Monson, General Manager for Crothall’s Rome plant, the key to controlling laundry expenses is to shift the mindset from a cost-per-pound mentality to a linen utilization mentality, the actual amount of linen used by the hospital. “Any linen processor can lowball a price and then profit through increasing poundage. But as cotton prices and expenses are going up, the best way to maintain quality, cost parity, and cost savings is to optimize linen utilization,” Monson said.

BHS’s Lean Team created goals to help manage linen costs:
- Focus on linen usage
- Reduce linen utilization by one pound per adjusted patient day (APD)
- Stabilize linen costs
- Maintain high linen quality standards

“Crothall committed to working side by side with us to achieve these goals,” Louviere said. “They committed to specific targets.”
WASH, RINSE, REPEAT
The first step was an in-depth linen audit of each floor and department. “We went through each individual hospital by department and determined who was hoarding linen, and also what areas were experiencing high levels of linen loss,” said David Pearson, Crothall’s linen utilization manager.

BHS was right at the industry average for laundry utilization, around 14 pounds/APD. It was all the little lapses that added up, like nurses grabbing extra linen and leaving it in rooms. “We were a little shocked at the findings,” said Brandie Hahn, Director of Materials Management for the Princeton campus. “We thought we were doing better than we were.”

From there, the BHS materials management, nursing, and infection control departments, along with Crothall’s linen experts, began to brainstorm for ideas. “There were a thousand different potential things we could try,” explained Louviere. “It was a lot of blood, sweat, and tears. There were no magic bullets.”

The Crothall team drew on their industry experience to find ways to lower the overall poundage. One clever idea was just to substitute slightly lighter-weight bath blankets for existing thermal blankets. Hahn says that nursing places a sheet on top of the bath blankets when patients request more warmth. This practice warms patients better than a thermal—while weighing a pound less.

BHS and Crothall worked together and came up with a diverse—yet practical—list of changes that could reduce overall linen utilization:

- Minimize hospital linens taken out on ambulances
- Don’t leave blankets at nursing homes after a patient transport
- Change bed linens every two days instead of daily (unless needed)
- Use color-coded bags to prevent throwing linen in the trash

And the most important item was simply adjusting the par levels on the exchange carts. “Nursing tends to use whatever is there,” joked Pearson. Crothall created an incentive for nurses to watch their own usage by offering credits back to each unit for any unused linen. According to Hahn, nursing directors began lowering their own par levels because they saw the benefit.

“You might think we just supply clean linen, but actually, one of the essential things we supply is accurate data,” said Monson. Accurate usage statistics allowed BHS to test linen control procedures to see if they were effective. That opened up the process to experimentation, to finding fresh solutions.

“We had to change trends that had been around for years,” Louviere said. “Crothall gave us a process, not just a product.”

FINDING STABILITY AND CONTROL
Within just a couple of months, BHS leadership noticed a change. “Everyone worked together and worked with intensity,” Louviere said. “And then bam-bam-bam—it took effect. The results have been phenomenal.”

When the Lean Initiative organized, the BHS hospitals hovered at around 14 pounds/APD. By May 2010, that had been cut about 17% to 11.69 pounds/APD. By April 2011, it dropped another 11% to 10.41 pounds/APD. The total decrease was 25% in about a year and a half.

Every pound reduced significantly cuts down on linen costs. Across Baptist Health System, those reductions translate into $215,000 a year in linen savings.

Even more important to Louviere, the focus on linen utilization has brought more reliability to their linen budgets. “We’ve lowered our linen utilization, which we could never do before,” he said. “Our linen costs have stabilized. We haven’t had a single CFO who’s complained in the last two years. We’re beating budgets on this.”