



# Case Study

# Miami Baptist realizes \$4.2 by Improving Patient Flow

Miami Baptist, a 520 bed facility located in Miami, Florida, was facing serious bed shortage and overcrowding in the Emergency Department. Inpatient volume was increasing at an alarming rate and the ED was frequently on diversion. Patients were "Leaving Without Treatment" (LWOTs) and overcrowding was affecting patient satisfaction scores as well as those of employees. Miami Baptist's senior management formed a multidisciplinary committee tasked with achieving rapid gains in patient throughput and patient flow.

# Miami Baptist Deploys Lean-Six Sigma to Launch Noon Discharge

### Miami Baptist's Needs

- Improve bed control and discharge procedures
- Increase patient throughput and reduce LOS
- Reduce the number of diversions and LWOTs
- Increase revenue and decrease operating costs

Miami Baptist engaged Caldwell Butler & Associates to support its initiative through the application of Lean-Six Sigma and its 100-Day Workout Productivity Series. Caldwell Butler & Associates assisted senior management in identifying potential strategies to yield significant improvements in patient flow. The stated goal was not simply to empty beds, but to send patients home in a less stressful and more efficient manner. A secondary goal was to generate gains in financial performance through cost savings. During implementation, Caldwell Butler & Associates employed the DMAIC method (Define-Measure-Analyze-Improve-Control) to validate the effectiveness of each proposed change and launch two waves of its 100-Day Workout.

**Process Flow and Statistical Analysis:** Caldwell Butler & Associates deployed its expertise in Lean-Six Sigma methodologies to identify and quantify potential opportunities for improving bed control and reducing length of stay. The statistical analysis of the discharge process revealed that 60% of the patient discharges were occurring on the afternoon and evening shifts. Research also indicated the discharge process was leaving the patient and family increasingly dissatisfied. Caldwell Butler & Associates used its extensive healthcare experience to identify opportunities for Miami Baptist to increase the percentage of patient discharged prior to 2:00 pm. Analysis revealed this change would yield significant gains in capacity, patient satisfaction and financial performance.

**Strategy Development:** With the support of Caldwell Butler & Associates, Miami Baptist organized into five teams. Each team focused on different areas including Pediatrics, Triage, Fast Track, Time to Diagnosis and Time to Discharge. The teams began assessing a multitude of possible strategies. Caldwell Butler & Associates provided the expertise to process flow analysis to assist each team in determining which Change Concepts would produce the most dramatic improvements.

**Implementation of Rapid Cycle Testing:** CBA provided its expertise to test and implement each of the identified Change Concepts. Methods of Rapid Cycle Testing were utilized to accelerate the achievement of results. The results of each project were analyzed using advanced statistical methods to quantify effectiveness and estimated an ROI.

### **Change Concepts**

- Hospitalist engaged at triage
- Decrease wait times for diagnostic results
- Unit-based discharge expeditor
- ED control of Overflow Care Unit

## **Demonstrated Results of Miami Baptist Implementation**

As a direct result of the services provided by Caldwell & Associates, Miami Baptist was able to achieve:

#### **Measurable Benefits:**

- Noon discharges prior to 2:00pm increased from 41% to 80%
- ED manhour worked per patient visit decreased by 22%
- ED Length of Stay (LOS) was reduced by 41%
- Patient LWOTs decreased from 8% to less than 1%
- Direct admissions increased by 181%
- Patients held in ED due to bed availability decreased 37%
- An ROI on Caldwell Butler & Associates of 10:1

#### **Intangible Benefits:**

- · Fewer patients sent to the ED by physicians due to bed shortage
- · Rapid deployment of proven methods and techniques for improving productivity
- · Sustainable processes through on-site mentoring and apprenticing



Caldwell Butler & Associates

For additional information, contact:

Greg Butler 832.372.2465 gregb@CaldwellButler.com or visit: CaldwellButler.com

#### Caldwell Butler & Associates, LLC

Caldwell Butler & Associates is an innovative firm specializing in strategic deployment of Lean-Six Sigma resulting in cost position improvement, financial turnarounds, and patient throughput optimization. Caldwell Butler & Associates has assisted hundreds of clients increase productivity, maximize patient throughput, and improve patient satisfaction. Our team is exclusively dedicated to healthcare and brings extensive practical experience in hospital operations to each project. Our knowledge of the healthcare environment allows us to implement effective performance improvement programs tailored to the specific needs of your organization. Caldwell Butler & Associates is the trainer of choice for both the American College of Healthcare Executives and the American Society of Quality. During the past decade, Caldwell Butler has personally trained thousands of senior hospital executives in the effective healthcare application of Lean-Six Sigma. Chip is a nationally recognized author of four leading books and served as the healthcare representative on the U.S. Quality Council.

Unlike traditional consulting firms, Caldwell Butler & Associates believes on-site mentoring and apprenticing are the most effective methods for achieving sustainable gains in performance. Our on-site programs empower your employees by providing them with the tools to attain new levels of performance. We offer proven techniques and methods for enhancing personal accountability, monitoring progress of initiatives and tracking your ROI on each project. Where most consulting firms are satisfied with finding "identified savings," Caldwell Butler & Associates works along side your team throughout implementation thus providing you with a sustainable process for managing the entire productivity improvement cycle.

#### Caldwell Butler & Associates apprenticing and mentoring programs include:

- Effective use of aggressive benchmarking data
- Proven techniques for non-negotiable goal-setting
- Methods of identifying waste and generating cost savings strategies
- Creation of implementable 100-Day Action Plans
- Flawless execution of performance improvement projects
- Creation of internal tracking methods for enhancing personal accountability

