

**Funded in part** by the state, SCMEP is a private, nonprofit group that serves as a proven resource to South Carolina businesses, providing a range of innovative solutions and strategies to cut waste, drive growth, and increase profitability.

SCMEP is the leading provider of lean solutions to South Carolina manufacturers:

- In 2006, 66% of SCMEP's engagements were focused on productivity improvement.
- Companies working with SCMEP over the last 6 quarters saved more than \$45 million.
  - 77% lowered their costs
  - 86% were more competitive

SCMEP is the exclusive provider of Lean Healthcare West® in South Carolina. SCMEP's Lean Healthcare South Carolina services also feature 5S Workplace Organization, Kaizen, and many other proven lean techniques.

**SCMEP will provide a Lean Assessment free of charge to healthcare provider partners as an initial step in the lean healthcare process.**



SOUTH CAROLINA  
MANUFACTURING  
EXTENSION  
PARTNERSHIP

For more information please contact:  
Lynn Weddle, Director of Lean Healthcare South Carolina  
(864) 901-3828 • [lweddle@scmep.org](mailto:lweddle@scmep.org)

[www.scmep.org/lhsc](http://www.scmep.org/lhsc)

Source: <sup>1</sup>Data reported to the National Institute of Standards and Technology (NIST) by 189 companies that worked with SCMEP from January 2006 - June 2007.

*The Lean Healthcare West® program has a proven track record of process improvements and bottom-line results in hospitals, long-term care facilities, physician office practices, and clinics nationwide. Following are case studies of successful implementations, including a recent project in South Carolina.*

#### South Carolina

**Problem / Action:** A visual scheduling system was developed by users at the surgeon's office and the hospital to improve patient wait times and surgeon utilization in a four-room OR.

**Results:** Surgery times were more predictable. Annualized savings of \$40,000 in OR overtime was realized. Employee satisfaction improved by reducing unplanned overtime. A projected 10-20% increase in revenue from surgery was enabled without a significant increase in costs by more efficiently using existing assets.



**Problem / Action:** Physicians and nurses worked to increase flow through the ER by improving bed utilization and patient registration.

**Results:** The hospital broke the "1,000 patients treated in the ER per month" barrier, a 17% increase. Overall financial impact was positive as fixed costs were absorbed to a greater degree across a larger number of patients. ER Press-Gainey scores indicated increased patient satisfaction. Synergies and a culture of improvement resulted from project efforts.

#### Wisconsin

**Problem / Action:** A team of hospital staff used a variety of lean healthcare tools to uncover inefficiencies and craft solutions to resolve wait time and communications challenges in the Emergency department.

**Results:** The changes had a dramatic, positive impact on Emergency operations. The hospital realized an annualized savings of \$230K in triage and primary nursing time combined. Patient wait time decreased by 59%, with total patient time in the department dropping to 2 hours. Better communication and physical layout markedly improved the department's ability to treat all patients in need of a physician's care.



# LEAN Healthcare South Carolina

Improving the quality and efficiency  
of healthcare delivery systems  
in South Carolina

A service of



**The nation's healthcare delivery systems are under stress:**

- Soaring insurance costs
- Record numbers of uninsured
- High levels of waste
- Reduced patient safety and increased medical errors
- Growing caregiver job dissatisfaction
- Worsening labor shortages



**These strains are intensifying** as nurses and doctors in short supply struggle to meet the unprecedented healthcare needs of a surge of retiring Baby Boomers.



**In South Carolina**, healthcare costs and coverage are top concerns of South Carolina families and businesses:

- Insurance premiums for families increased 136% from 1996-2005.
- 17% of the population was uninsured in 2005-2006.
- Rising healthcare costs is manufacturers' number one complaint.



**Challenging market factors** are driving a movement toward value and transparency in healthcare.

**Responding to these trends, SCMEP has developed a program, Lean Healthcare South Carolina, that harnesses the strength of lean manufacturing, the Toyota Production System, and Lean Healthcare West®, to improve the quality and efficiency of healthcare delivery systems in South Carolina.**



*"The national numbers [for waste in healthcare day-to-day work] are between 30% and 40%, but the reality of what we've observed is closer to 60%."*

The enormous pressures facing healthcare providers require eliminating any systems, services and actions that lead to inefficiencies, poor quality and negative health outcomes.

**Lean tools and techniques** offer caregivers a proven approach to improving productivity:

- Both manufacturing and healthcare require *processes* to produce an outcome; it could be a new automobile or a healthier patient.
- Lean improves outcomes by streamlining processes *to reduce waste, eliminate breakdowns, and shorten wait times.*



**Lean is about:**

- A culture and mindset
- Adding customer value
- Increasing efficiency
- Engaging employees in continuous improvement
- A bias for action

**Lean is not what we do; it is how we do what we do.**

The foundation of Lean Healthcare South Carolina is the reVIEW© program created by Lean Healthcare West©.



Developed by experienced healthcare professionals, reVIEW© introduces powerful principles and practices of the Toyota Production System (TPS) to healthcare delivery. TPS is considered the source of Toyota's outstanding performance as a manufacturer, enabling it to become the world's most successful automaker.



Using the primary TPS tools of Value Stream Mapping and A3 problem solving, healthcare workers learn to explore problems first-hand to find root causes and eliminate these non-value-added activities:

- Overproduction
- Waiting
- Confusion
- Non-value-added processing
- Excess inventory
- Defects
- Excess motion
- Underutilizing people's Knowledge, Skills and Abilities

The Lean Healthcare South Carolina program provides caregivers with a powerful but compassionate approach to solve problems and make improvements as they work to achieve the "IDEAL":

- Exactly what the patient needs, defect-free
- One by one, customized to each individual patient
- On demand, exactly as requested
- Immediate response to problems or changes
- No waste
- Safe for patients, staff and clinicians - physically, emotionally and professionally

**LEAN Healthcare South Carolina**

- **Generates immediate and ongoing improvements**
- **Makes people's jobs easier, not harder**
- **Helps prepare for JCAHO and Medicare certification visits and checks**
- **Empowers front-line workers**
- **Keeps patients the priority**

