

# Health care embraces manufacturing principles to improve processes

Process thinking is not new. Nor is process thinking a "flavor-of-the-month" system to be here today and to be replaced tomorrow with something new. Lean Enterprise, which is an organized systematic approach to process thinking, enables a company to view an entire process or system and to examine the linkages and connections between the pieces of the system in order to leverage minor improvements into significant results.



**GUEST COLUMN**  
Kendall Cobb

Many multinational manufacturers and their much smaller cousins have embraced Lean Enterprise principles to successfully identify and eliminate waste. In Lean terms, waste is any activity that does not add value to the product or service from the perspective of the customer.

When companies have fully implemented Lean Enterprise principles, they have typically experienced: lead time reduction of up to 95 percent; productivity increases from 20 percent to 50 percent; work-in-process reduction of up to 90 percent; quality improvement from 50 percent to 90 percent; and space utilization increases from 50 percent to 75 percent.

In recent years, a growing number of hospitals and health care facilities, here in Missouri and across the country, have begun to embrace Lean Enterprise principles to both reduce costs and improve patient care.

For nearly 25 years, Missouri Enterprise has provided hands-on process improvement assistance to manufacturing companies and in 2004, through its Advanced Manufacturing Specialist Training Program (AMSTP), began training hospital employees in Lean Enterprise principles.

Due to their enthusiastic response and the positive results realized by AMSTP participants, Missouri Enterprise has begun statewide efforts to introduce Lean Enterprise principles to more hospitals and other health care organizations in the state and to help them use these techniques to improve patient satisfaction and safety, increase capacity and control costs.

In a project at a medium-sized hospi-

tal in the southwest part of the state, Missouri Enterprise worked with key staff members and assisted the hospital's team in conducting a Value Stream Mapping session to identify and graphically represent all activities in the hospital's registration and billing areas. A high ranking hospital official who was involved had an "ah ha" moment when the project revealed that arriving patients would often spend 20 to 30 minutes looking for the correct registration desk.

Missouri Enterprise's systematic approach to Lean Enterprise has four basic steps: Assess and Plan; Learn; Implement; and Control and Sustain.

This approach begins with an evaluation of the facility's current ability to see the linkages and connections between their processes and departments and establishment of targets for improvement.

In the next step, staff members from across the entire operation are introduced to and trained in slightly modified versions of the Lean Enterprise principles that work so well in manufacturing. This is an important prerequisite to the next step, implementation, as empowering staff members to take responsibility for improving processes is a key to successful implementation.

As the staff members implement their plans for improving the facility's processes, they and management, also create the means to maintain control of the processes and sustain the progress that is made.

With healthcare comprising such a significant portion of a company's expenses and the constant need for hospitals and health care facilities to integrate new techniques and technologies, train and retrain staff members, meet federal, state and local regulations and answer to a wide range of customers and stakeholders who often hold conflicting opinions, process thinking and Lean Enterprise principles offer great potential for developing necessary and effective continuous improvement programs.

*Missouri Enterprise is an organization composed of experienced manufacturing and business management professionals who provide business and technical assistance to help Missouri companies succeed. It manages the Manufacturing Extension Partnership in Missouri and one of the state's innovation centers. Kendall Cobb is a Missouri Enterprise project manager and leads its health care initiative.*

# Joplin Tri-State Business