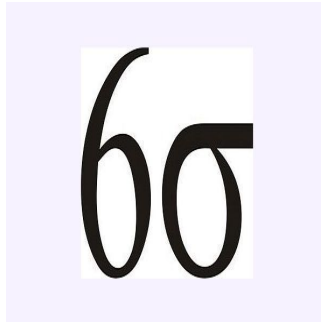


## Lean Six Sigma: Eliminating Wasteful Practices For Improved Efficiency



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Hospitals emergency departments are seldom praised for short wait times, adequate bed capacity and stress-free employees. Those things may be unattainable goals in public hospitals, but a new study from university researchers in Melbourne, Australia indicates that healthcare organisations can learn from a management style that works in other contexts. Lean Six Sigma (LSS) combines two methods for efficient process management which were originally tested by the automobile and manufacturing industries.

### Lean Management and Six Sigma

Lean Management is a style which focuses on “waste” reduction: lowering the incidence of unnecessary spending through ongoing oversight. Meanwhile, Six Sigma works by eliminating defects in processes using disciplined and data-driven techniques. Lean Management can “accelerate” the effects of Six Sigma when they are implemented together in LSS. In a healthcare setting such as a hospital emergency department (ED), it has the potential to reduce stress and work levels for staff, and to improve waiting times for patients.

“In recent years hospitals have been trying to adapt LSS processes to streamline processes and improve costs,” explained Professor Greg Bamber of Monash Business School. “There have been earlier claims about work intensification experienced by employees in lean manufacturing. Therefore, we studied the outcomes after transferring LSS concepts into a hospital context, to streamline processes and improve costs there.”

### LSS Implementation in Hospitals: Challenging But Worthwhile

The Australian researchers wanted to know whether the application of LSS, which had been shown to be effective in a manufacturing context, would shorten waiting times in a large hospital's ED. They were also interested in whether LSS would improve the transition of patients through the hospital system, from admission to discharge, and how it might beneficially impact staff workload and stress levels.

It must be noted that the implementation of LSS in the hospital setting proved to be more challenging than its use in manufacturing. In order to be successful, hospitals should have the required resources and the involvement of key stakeholders in the process, including front line staff, said Professor Pauline Stanton from RMIT.

Nonetheless, the researchers found that LSS implementation allowed the hospital involved in the study to install new software which monitors bed availability, and more beds were opened to patients. The availability of more rehabilitation beds improved the discharge process, enhancing patient flow through the care process. As in-patient numbers decrease, staff work levels come into an improved balance.

The study was conducted by a multi-site team of researchers from Monash University, Victoria University, La Trobe University and RMIT. It was supported by the Australian Research Council. Preliminary results appear in a special issue of *International Journal of Human Resource Management*.

Source: [Monash University](#)

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