

Case Study #16

RAPID-CYCLE IMPROVEMENT PROCESS, USA

The processes that are used across hospitals are rarely consciously designed - they emerge and evolve over time. Inefficient and unproductive processes can take staff away from patients, lengthen waiting times and hamper patient flow.



APPROACH

William Beaumont Hospitals in Michigan underwent a hospital-wide improvement process using Toyota Production System principles to strip out unnecessary and wasteful processes. Working with two Toyota-trained consultants, “rapid-cycle improvement processes” were used in the medical/surgical unit, patient transport, medication dispensing and the emergency department. “Rapid-cycle improvement events” are two day periods where staff come together with a trained facilitator to observe a particular process or activity, identify problems or waste and brainstorm the possible changes. These changes are then rapidly implemented and tested.

In the emergency department, patient flow to Radiology was altered; rather than sending patients across in ‘batches’ they were only transferred when the department was ready to receive them. A former storeroom was converted into a distraction free zone, where physicians could write orders without being interrupted. The timing of the admission process was moved to start as soon as the ED physician and nurse decided that admission is likely, as opposed to after a laboratory workup has been completed.



IMPACT

The time nurses spent with patients increased from 34% to 54%. Admissions for ED patients became faster with the average waiting time reduced by 50%. Diagnostic tests, such as radiology requests, were carried out more quickly, and patient satisfaction increased. In medication administration, improvements led to fewer IV medications being discarded, saving an estimated \$400k each year.

Sources

<http://www.innovations.ahrq.gov/content.aspx?id=3027>



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