The Ultrasound Workflow Productivity Project

The Problem
The Sonographer workflow project was undertaken in the Ultrasound, Radiology at Middlemore hospital in Auckland, New Zealand, by a team of sonographers, radiologists and patient care assistants (PCAs). Initially a Value Stream Analysis was performed and opportunities for improvement were identified. The current process took 70 minutes. There were multiple inefficiencies that interrupted the staff and slowed things down and this had been happening for the last 12 months.

Goal Statement: Reduce the Ultrasound turnaround time by 20% and increase process cycle efficiency by 31 May 2014.

Current Process / Understand

Current issues:
• Too much administrative paperwork
• Too many trays with forms sitting in them and no one checks them
• Multiple forms with the same information
• Orderlies forget to communicate or drop of request form
• Haematology were not getting to see scanned patients

Analysis

Key causes identified:
• Lack of standardised protocols & tasks for the PCA
• Cluttered and unorganised work area
• Multiple forms with the same information
• Lack of standard work and central coordination
• No standard visual signal to indicate whether or not the patient needs to go Haematology after a scan

Future Process / Improve

Results
• Reduced process steps & staff walking by simplifying work
• De-cluttered and organised the shared work spaces via a Lean 5S
• Established a central coordinator office to arrive all inpatients
• Reduced turnaround & wait time by 17%
• Standardisation of processes
• Improved patient and staff satisfaction levels, reduced stress levels

Lessons Learned

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