

## **IMPROVING PATIENT FLOW THROUGH APPLYING LEAN CONCEPTS TO EMERGENCY DEPARTMENT**

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**E**mergency department overcrowding (EDOC) and increased length of stay (LOS) have been key global issues for more than 20 years, as they have serious repercussions. No measurements have been done to assess the situation nationally. Expanding EDs and adding more beds have never succeeded in eliminating wastes and targeting the root causes of the problem. The paper used direct observation for seven days to collect patient flow data on ED patients at a secondary care hospital in Kuwait. It calculated wait times and services to identify the major causes of EDOC and increased LOS. Around one-third of the ED design capacity was utilized by 12% of the patients who stayed >six hours each. The wasted waiting time represents 56.2% of the aggregated LOS, which puts Lean management (LM) on the top of the process reengineering approaches suitable for improving overcrowding by reducing waste. Guided by the LM concepts, the paper proposes solutions that fall under three themes: ensuring effective triaging of all patients, reducing the total number of patients referred to observation room, and reducing maximum LOS and wait times in observation room. The selected solutions address the vital few causes of the EDOC and prolonged EDLOS.

### **Biography**

Hossam Elamir holds a Graduate Degree in Medicine and Postgraduate Degrees in Quality and Healthcare Management. He worked in the National Guard Health Affairs (KSA) and the Specialized Medical Centres (Egypt), before joining the quality and Accreditation Directorate (Kuwait). He was appointed as the Head of Quality and Accreditation Office in one of the general hospitals for seven years, then a Leader of a Technical Support Team which is covering a number of governmental hospitals. He is a Certified Professional in Healthcare Quality (CPHQ), Healthcare Risk Management (CPHRM), and a Healthcare Accreditation Professional by Accreditation Canada International.

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