Reducing cycle time of incident reporting closure process at SQUH using Lean principle

Introduction: Implementation of Lean in healthcare and the broader public sector are often studied. As so many authors stated, Lean started in the 1940s but it was launched in the healthcare system in 2002. At Sultan Qaboos University Hospital (SQUH) in Muscat, the current Incident Reporting System (IRS) is taking up to 9 months starting from receiving the incident till the disclosure in the concern department. The available statistics at IRS Cycle Time (CT) from 7 - 14 Working Days (WDs).

Objectives: This paper aims to reduce cycle time of incident reporting closure process at SQUH using Lean principle. There was an agreement to reduce the IRS CT by 60% (26–39 WDs) by APRIL 2020.

Method: At the beginning of July 2019, the charter of Lean project have been agreed between sponsor, champion and Lean practitioner. A team has been created to achieve the project's objectives. This team is consisting of a sponsor, champion, lean practitioner and team members. The research team will use lean concept as a tool to identify root causes, re-map the value stream and suggest countermeasures to achieve the targeted outcomes.

Results: The team has suggested 16 countermeasures to overcome the above problems. These solutions have been prioritized based on their easiness for implementation and their level of impact. At the end, the CT has been reduced from 372 WDs to 168 WDs and from 146 WDs to 34 WDs (55 % reduction). However, the process efficiency rate did not change after the implementation of the countermeasures.

Originality:

Key words: Lean, Cycle Time (CT), Incident Reporting System (IRS). Value Stream Mapping (VSM), Sultan Qaboos University Hospital (SQUH) and Oman.