

Lean in Healthcare

OVERVIEW OF ISSUE

Lean (also called Lean Enterprise or Toyota Production System) is an improvement methodology that seeks to optimize value from the patient's perspective by reducing waste in time and resources that do not enhance patient experience/outcomes. When applied throughout an entire organization, Lean principles can have a powerful effect on productivity, cost, quality and patient experience. Risk managers may play a role in identifying processes that should be improved and participating in Lean process improvement events.

KEY POINTS

- Lean focuses on using less to do more.
- Lean seeks to improve value for patients.

THINGS TO CONSIDER

Assess Value

- All organizations (including healthcare organizations) have in place a series of processes or sets of actions meant to create or add value for users of the service (patients, clients, customers).
- The foundation of Lean involves identifying the value of any given process by separating value-added steps from non-value added steps, and eliminating waste – Value Stream. Ultimately every step in the process creates value for the patient, client, and customer.
- At the beginning of the Value Stream exercise the team must identify who the customer is and determine who will benefit from making value flow from beginning to end.
 - The patient or client may be the customer if the process provides direct/indirect care;
 - Internal departments may be customers of each other i.e. materials management supply chain;
 - External customers may also be considered in a Value Stream i.e. vendors.

Eliminating Waste

- When completing a Value Stream the seven forms of waste to identify and eliminate are: duplication; waiting; defects; overproduction; transportation; unnecessary inventory; and unnecessary motion.
- Examples of waste in a healthcare organization include:
 - Duplication – clerical staff performing the same tasks due to inadequate communication and

procedures;

- Waiting – long wait times in the emergency department;
- Defects – redraw blood work due to compromised sample, patient identification errors.

Kaizen Event

- Kaizen means “change for the better” in Japanese and it is a rapid cycle improvement approach, based on A3 thinking. A3 thinking defines a problem and goal for improvement, targets change and plans a series of tests to determine measures; it is similar to the model for improvement.
- Designed to compress the timeline for results, a Kaizen event teaches team members Lean tools and techniques, and influences the culture of the organization through quickly “seeing and eliminating” waste.
- Relationship building between departments is an outcome of a Kaizen event as staff work together with a common goal, using a common approach. The Kaizen team is empowered and supported to make meaningful change for the benefit of the customer.

Care at the Frontline

- In Lean, the workplace or gemba is the fundamental source of improvement. Both healthcare workers and leaders need to identify areas of improvement at the front-line.

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Standard Work

- In Lean settings, improvement is based on standard work.
- Standard operating procedures (SOPs) are a set of clearly written instructions which outline steps or tasks needed. The SOPs are written in a brief manner in simple language that all employees are able to read and understand. The benefit of having SOPs include: elimination and/or reduction of errors and solving process/production problems.

Lean and Risk Management

- Integral to the Lean Value Stream, a Risk Assessment is required to minimize, monitor and control the probability and impact of an adverse outcome related to the process improvements.
- Risk managers will develop a risk plan and determine control mechanisms through preventative and corrective action plans. Examples of corrective actions include: error proofing, visible or audible alarms, process redesign.
- Risk managers ultimately select the best risk management strategy – avoidance, acceptance, mitigation or transference.



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