



LEAN HEALTH CARE

BACKGROUND

Demand for health care services is driven by demographics and advances in medical care and technology. The profitability of individual companies depends on efficient operations and, in the case of many non-profit health care providers, obtaining grants and government funds. Large companies have advantages in accessing the latest medical research, buying supplies, offering a wide range of services, and negotiating contracts with health insurers. Small institutions can compete successfully by serving a limited geographical area, offering specialised services, or building a local reputation for quality care. The sector is highly fragmented: the top 50 organisations generate roughly 15% of revenue.

CHALLENGES

Compared to other industries, health care has been slower in identifying who the customer really is. Because of the complexity of the health care system, internal customers — physicians, hospitals, insurers, government, and payers — have often driven processes. It is critically important that value be defined from the point of view of the primary customer: the patient.

Health care also faces the same sorts of challenges that manufacturing companies face. Instead of lower availability of machines due to downtime and changeover times, hospitals face uncoordinated schedules and breaks between medical departments and long changeover times of Operating Room as an example. While production facilities face challenges in the logistics of raw materials and lack of production flow in their processes, hospitals have waste in their central pharmacy logistics for distributing medicine throughout the different wards, and patients and physicians alike suffer from below optimum layouts and process flows in the walk-in clinics and OR.

FOCUS AREAS

Lean always starts with first understanding value as defined from the customers i.e. primarily the patients, both out- and admitted patients, and then the physicians, hospitals, insurers, governments and payers. Looking at health care from the customer perspective results in the identification of certain processes and areas that create and contain waste and where the application of Lean can significantly impact the process by reducing such waste and increase the value add to all customers involved.

AREAS OF WASTE OFTEN IDENTIFIED IN A HEALTH CARE ENVIRONMENT:

TRANSPORTATION & HANDLING

Delivery of medication from central pharmacy, moving specimens long distances from receiving to testing, distributing supplies from distant supply room to various wards/clinics, delivery of surgical pack to OR.

INVENTORY

Expired test reagents, expired drugs, overstocked medication throughout the different wards, physicians' personally preferred medicines overstocked.

MOVEMENT

Looking for supplies, information, doctors and patients. Long walks from MD clinic to chemotherapy, scheduling that creates work-around and re-work, inefficient clinic layout that causes patients to go back and forth between stations.

WAITING

Test specimens waiting in batches for testing, outpatients spend most of their doctor visit time waiting in spite of arriving on time for their appointment, hospital staff waiting for others due to meetings, procedures, surgeries, etc...

OVER-PRODUCTION

Duplicate charting, filling multiple forms with the same information, automatic sending of reports to several departments of whom only some need them, blood tubes drawn from patients but not used.

OVER-PROCESSING

Regulatory paperwork, insurance company forms, time spent on stamping/signing labels that are not used or creating schedules that are not followed.

DEFECTS

Surgery errors, mistakes in medical charges and billing, mislabelled patient specimens, misdiagnosis, wrong medication delivered to patients, clarifying doctors' handwriting.

LEAN SOLUTIONS

Applying Lean health care eliminates wasted time and resources, increasing the efficiency of the process of admitting and treating patients, thereby allowing more patients to be treated using the same resources. This allows medical service providers to leverage existing assets, and generate higher margins. The benefits of Lean health care are significant, and go well beyond financial rewards.

LEAN HEALTH CARE CAN BE APPLIED IN MANY AREAS, SUCH AS:

LABORATORY SERVICES

Increasing the usable space to carry out laboratory testing and sample analysis helps to increase productivity, efficiency, and the accuracy of results, while decreasing the amount of time patients have to wait to receive their test results.

OPERATING ROOM PROCEDURES

Operating room procedures can be made more Lean to reduce the time taken between operations, thereby increasing the number of operations that can be done in a day. Lean health care can also be used to increase operating room space and reduce the number of tools and amount of inventory used. This in turn decreases the costs and makes the operating room an easier and more effective location for surgeons and operating staff.

HEALTH CARE STAFF

Increasing patient satisfaction, improving the work environment, and decreasing the long hours that health care staff have to endure, Lean health care helps improve job satisfaction, morale and motivation, thus making the health care sector a more attractive prospect for both existing and new staff.

HEALTH CARE ADMINISTRATION

Improving the efficiency, speed and costs of administration and processing of patient information and other data used in the day-to-day running of a health care organisation increases the overall satisfaction of the patients, physicians, other hospital staff, insurers and other stakeholders.



TANGIBLE IMPROVEMENTS

LEAD TIME

- Reduction of average outpatient waiting time throughout entire clinic visit by 38%
- Improvement in bed management by reducing the retention time of uncomplicated cases by 31%
- OR changing/prep time reduction by 30%

QUALITY

- Complaint reduction on doctor documentation from referring physicians and clinics by 50%
- Increase of admitted patients' satisfaction with doctor rounds by 18%

COSTS

- Staff's time tied to re-work reduced by 75% due to implementation of Lean central bed management process
- Increasing OR utilisation by 25% due to reduction of OR changing/prep time
- Increase in physicians' capacity to handle 12% more outpatients by freeing their time from wasteful activities

Should you be interested to know more about our Lean services regarding this topic, then please contact us:

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