

32. HARNESSING LEAN MANAGEMENT TO IMPROVE TREATMENT QUALITY AND EFFICIENCY

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BACKGROUND:

The Institute of Care and Assistance (IFCA) in Florence, Italy wanted to establish a patient-centred process of care. At the same time, it wanted to improve efficiency, i.e. 'do more with less' – optimizing efforts, time and space through better work organization and processes.

OBJECTIVES:

- Introduce Toyota Lean Thinking – to make processes efficient in an excellent clinical environment
- Ensure that all actions within the hospital add value – improving efficiency and quality
- Achieve a 'zero-error' approach – enhancing value-added activities and eliminating non value
- Standardise and measure processes and activities

METHODS:

The IFCA's main work stream was the 'patient surgery path'. The project team chose to improve key parts of the process: patient booking, nurse room layout, and coordination between hospitalization and surgery.

The patient booking process was broken down into subparts and was monitored in order to define critical issues – delays, errors and the chaotic working environment. The process was then remapped in order to identify efficient alternatives. The same method was used to improve all other process components.

Other lean instruments were also used to improve specific activities. For example, the nurse rooms were reorganized according to the Japanese '5S' principle – Sort, Systematic arrangement, Shine, Standardise, Sustain. The basic idea was to ensure 'a place for everything and everything in its place'.

The coordination between hospitalization and surgery was analysed using 'root cause analysis'. This enabled the IFCA to improve the services provided to patients.



Video showing management of medical devices using RFID technology.

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Problems	N°	Solutions	2017
Phone calls left on standby for mistaken data	70%	Webbooking	0%
Booking timing	3 minutes	Webbooking	0 minutes
Delayed registration through phone booking	8 minutes	Webbooking	4 minutes
Redundant activity	40% redundant activity	Layout workstation	0%
Delayed submission of patient booking	80%	New procedures	0%
Reduction of external phone calls for generic information – 70%	50%	Greater control by the switchboard – Webbooking	3%

Identifying problems and solutions through patient booking analysis.
Source: Casa di Cura Ulivella et Glicini

Nurse room before 5S analysis



Nurse room after 5S analysis



Improving nurse-room layout – before and after 5S analysis. © Casa di Cura Ulivella et Glicini

RESULTS:

What has been achieved?

- ✔ Patient booking analysis improved call response rate, booking timing, data recording and submission of patient bookings, and reduced redundant activity
- ✔ Nurse-room layout optimised, after 5S analysis identified inefficiencies and suggested improvements
- ✔ New streamlined patient flow in surgery
- ✔ Periodic training introduced, changing work habits and mindsets

TAKE-AWAYS:

What worked well?

- ✔ Introducing a multidisciplinary, bottom-up approach to engage and motivate the staff
- ✔ Streamlining business processes – one process at a time
- ✔ Using simple lean management tools to eliminate waste
- ✔ Monitoring progress on the ground
- ✔ Involving the staff in every important change-related decision – so that everyone knows what objectives are to be achieved and why
- ✔ Getting results quickly and giving evidence to demonstrate that staff can work with less effort, in less time and make fewer mistakes – this is important for the management tool
- ✔ Adopting a zero-error approach to provide a more effective and efficient service to patients

