

Experiences from Lean inspired work in a hospital

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1. Introduction

The Department of ophthalmology at Vrinnevi hospital in Norrköping, Sweden with 55 employees has worked with Lean since four years. The strategy was initiated and is supported by the hospital management and the County Council and its politicians. The aim of this extended abstract is to describe the practical Lean work and changes introduced and implemented. A further aim is to present some of the results.

2. Methods

The experiences from the Lean implementation at Vrinnevi hospital is described by the authors, who are practitioners and part of the management group of the Department of ophthalmology. The experiences shared here come from many years of implementing Lean in the organization and from benchmarking with other organizations. The experiences have been compared, discussed and criticized. From that background, a shared view has gradually formed, and is described here.

The methods used in the introduction of Lean can be described under a few headlines, see below.

- a. The employees have gained **knowledge** about Lean by attending the Lean Academy education given by the County Council. A few employees have also attended a five week Lean course at a University of Technology. There are several Lean coaches at the department. The management, the chairmen and the board, have attended courses special courses for leaders and a two of them have attended the course at the University.
- b. Detailed **capacity planning** developed by a logistics expert is used on a weekly basis in order to optimize availability demands regarding patient visits and treatments. For example cataract surgery is peaked in May, whereas it is minimized in June/July during summer vacations. Proactive capacity planning is used to plan absence due to courses or vacations.
- c. **Visualization** of ongoing processes takes place on several white boards throughout the department; for the different teams, the board, the secretaries and nurses. The board uses their white board continuously, on process meetings and board meetings. Key performance indicators are displayed in order to visualize and follow up processes and goal fulfillment. The “Lean house” is used in visualizing the visions and goals of the department.
- d. **Teamwork** has been introduced as one of the latest concepts. The employees work in six different teams.
- e. A **minimum of waste** and smooth processes are strived for. An increased “knife

time” in operating theatres is a main goal. Time required for writing medical records is minimized.

- f. **Special clinics** have been set up in order to increase the flow of patients, where nurses are the prime caregivers and an ophthalmologist works as a senior consultant.

3. Results

-Goals. The department of ophthalmology was the only one in the Centre to fulfill goals of the County Council offering appointments and treatment/surgery to all new patients within 60 days during all months in 2013. The key factor behind this success is the detailed capacity planning, in which a schedule maker and a logistics expert plan according to the needs of appointments and surgery. Of course, four experienced cataract surgeons have been the basis for the results.

-Lean has grown into a **culture**, and is present everywhere. All employees see the potential of continuous improvements and the problems of waste.

-Continuous improvement is present in the daily activities and visualization of ongoing processes take place on white boards.

-Patient satisfaction is high, according to regular patient questionnaires.

-Last autumn **team work** started. Several new projects have been suggested, mostly from team members. Every second week one hour team work is scheduled. Two of the team leaders are regularly invited to the board-meeting to discuss. The management is there to support, to inspire and urge not to give up and also to have fun.

-The management group visited the truck manufacturer Scania to gain inspiration.

-The employees work continuously with **routines and standards**. All workers develop their standard procedures, and new routines and check lists are introduced. The employees have two jobs, their ordinary and improvements. The main goal is to give the patient, the customer, the best treatment and service.

-The patients have the opportunity to **direct booking** and they get **text-reminders** of their visits by sms in order to minimize “forgotten bookings”.

-A communication plan has been written in order to communicate changes.

-The leaders try to be present out in the clinics and participate in the daily work at the clinic. The chairman came from a department where Lean was not introduced and can compare the work procedures and the culture.

4. Conclusions

One problem is that the improvement work takes time from the everyday work with the patients, at least initially. Every second week one hour is dedicated to improvement work. In order to continue the development, some of the gains obtained must be invested in further improvements. The fact that we have fulfilled our goals must not lead to reduction of employees. So far, the teams have come up with an increasing amount of useful ideas all of them registered and a lot of them planned and implemented. There is a great difference compared to previously. Not all members of the staff are enthusiastic but do not contradict the work with Lean. A positive atmosphere is of great importance. The focus on Lean has inspired a change process in which different Lean tools have been used together with other concepts. The changes have resulted in improved service to the patients and also opportunities for the employees to influence their work situation. The management’s belief in Lean is of utmost importance and taking time and effort to participate in this conference is one sign of this.