

# 04. AWARD-WINNING ADAPTATION OF A SECTOR-INDEPENDENT SUPPLY CHAIN PROCESS & INFORMATION SYSTEM TO A CLINIC

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## BACKGROUND:

The University Hospital in Graz, Austria, set out to establish a well-functioning and coordinated supply chain, in order to gain a better overview of its highly complex hospital logistics and manage the daily demand for materials more effectively. The overall logistics concept integrates various part concepts (TK) and logistical core processes into a single 'Supply Chain Operation Model' (SCOR) process.

## OBJECTIVES:

- Record existing material flows – using graphical representation as the basis for performance analyses of existing material flows, supported by the implemented transport control system (TLS) (including reporting and monitoring)
- Identify room for improvement – to optimise existing processes
- Redesign information flows – to link processes (referencing) and make interfaces and information flows more visible
- Integrate the human factor: to reduce or prevent errors

## METHODS:

The logistical process overview provides the basis for the overall logistics concept. This encompasses the most essential logistical core processes that the various organizational units carry out at the Graz University Hospital in Austria.

Specifically, relevant core processes were modelled using ADONIS software and integrated into the process overview based on the SCOR model, developed by the Supply Chain Council. This model is a long-established, industry-independent standard process reference model for information exchange between supply chain partners.

The structure of the process overview follows the principle of 'source-make-deliver'. Other aspects offered by the SCOR model have deliberately been excluded for the time being. These aspects include topics like planning, repatriation and key figures, which will be integrated into the SCOR process overview in the medium term.

Overall logistics concept integrating various part concepts (TK) into a single SCORE process.  
Source: LKH-Univ. Klinikum Graz



View of the University Hospital in Graz.  
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## RESULTS:

### What has been achieved?

- ✓ Problems recognised and eliminated early on – when conceiving and implementing the overall concept
- ✓ Significant benefits obtained quickly – e.g. drastic reduction in emergency drug requirements
- ✓ Trolley lead times minimized and lift capacity improved – thanks to integration of new 'Lean Management/Lean Logistics' approach
- ✓ New streamlined delivery schedule for pharmacy goods and material assets – to avoid delays and shortages
- ✓ More clarity on the importance of individual logistical processes – after visualising them and integrating them into the overall logistics concept
- ✓ Improved support processes (a mainstay in such a sensitive area) have enabled the smooth running of medical-nursing processes

## TAKE-AWAYS:

### What worked well?

- ✓ Identifying main hurdles to be overcome and visualising all upstream and downstream logistical core processes – to improve transparency
- ✓ Creating a common logistics concept and interface, integrated into the hospital's existing overall process map
- ✓ Relieving nursing staff of logistical tasks like requesting, receiving, or storing goods for patient care
- ✓ Establishing a delivery schedule to speed up the delivery of pharmacy goods (same day delivery) and manage material more efficiently
- ✓ Increasing lift capacity and storage space to reduce clutter and stress
- ✓ Improving documentation processes to facilitate the efficient handover of goods to different services
- ✓ Having open communication and involving all parties in the change – leading to the adoption of the 'shared office' concept

