

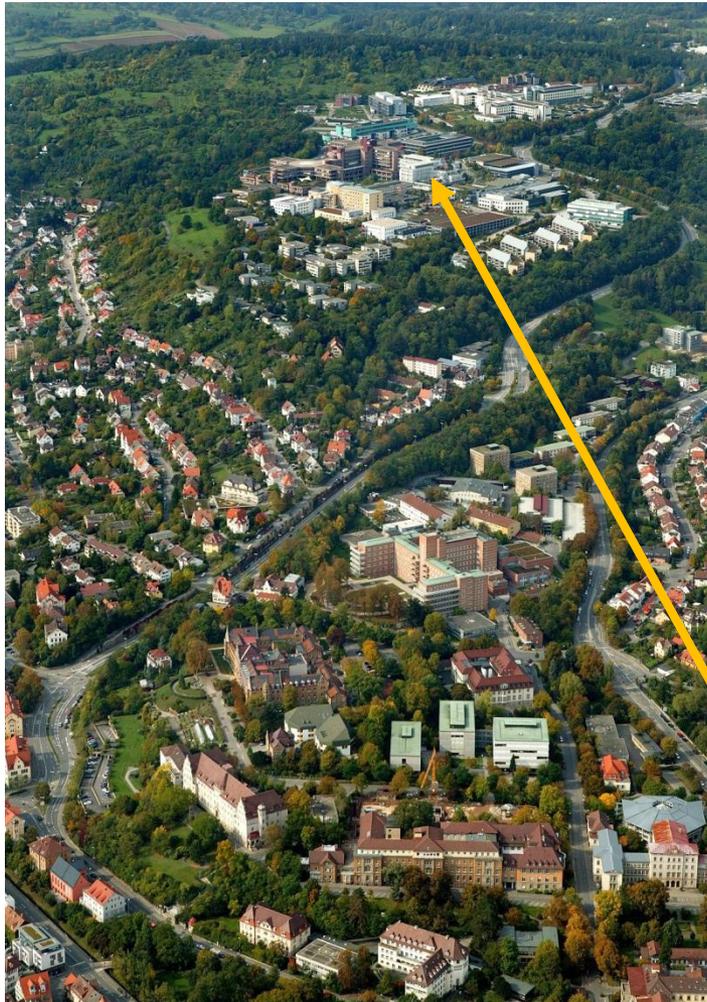


Case-related provision of reusable medical devices and disposables in an operation theatre

Toni Zanette
Head of CSSD

University Hospital Tübingen, Germany

The University Hospital has established itself as one of the leading Centres of Medicine at University level in Germany.



CRONA-Clinic

University Hospital Tübingen, Germany

Facts, figures and information

- opened in 1805
- an Independent Public-Law Institution with an Executive Board of Directors and a Supervisory Board of Directors
- 17 Hospitals with 39 Departments
- Medical Centres (MVZ)
- 10 Institutes
- 12 Centres
- approx. 1500 beds
- approx. 68 700 in-patients per annum
- approx. 344 000 out-patients per annum
- an average hospitalisation period of 6.8 days

University Hospital Tübingen, Germany

Economic key data in T€	2010	2011	2012	2013
Total proceeds health-care	432.858	442.906	465.596	490.817
Balance sheet total	822.037	830.345	832.932	851.837

An health care enterprise with nearly
one billion € turnover

Central Operations Department in one of the Hospitals (CRONA)

- From simple appendectomy to complex neurosurgical procedure – about 12,000 patients are operated in the CRONA per year.
- About 45 times a day, the operating rooms are busy with an average duration of three hours.
- Central Management (medical and nursing) for optimal use of all resources



System in transition, from the „classical form of organization“ to functional area separation

The „classical form of organization“ in the Central Operations Department (COR) has been (and in 85% **still is** in operation!):

- Planning of the operations for the next day at **16:00 h** by doctors of the different departments
- Planning of the anaesthesia by doctors of the anaesthesia department
- Planning of the OR-nursing by the COR management
- Preparation of needed materials (instruments, drapes, gloves, etc.) by OR-nursing (assisted by „care assistants“) at the end of the daily OR-programm

System in transition, from the „classical form of organization” to functional area separation

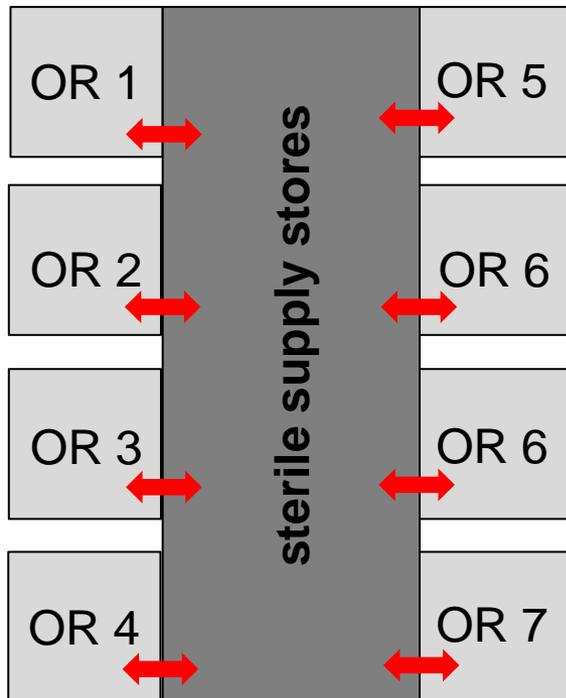
Daily practice:

At 19:00 the plan is changed

Stress, hustle and bustle,
overload at the next morning

System in transition, from the „classical form of organization” to functional area separation

But the „classical form of organization“ can absorb the problems.



85% of the needed sterile materials, Instrument-sets as well as disposables are stored in the sterile supply stores between the operating rooms



System in transition, from the „classical form of organization” to functional area separation

Experienced staff (senior nurses as well as experienced care assistants) prepare the needed tools and materials for the operations during or between the running daily programm.

Short ways, profound knowledge of the place of storage and a high flexibility of all employees is required!



System in transition, from the „classical form of organization“ to functional area separation

... furthermore a high flexible CSSD

(rush orders by phone or fax, „special treatment“ for the „cash-cows“ in medicine)

System in transition, from the „classical form of organization” to functional area separation

Side effects:

- stress
- hustle and bustle
- overloaded staff
- poor documentation of consumption
- „elite knowledge“ (if the knowing person is not available, nobody else can help)
- blaming other departments (CSSD, ward, anaesthesia,)

can be continued

The hospital as an enterprise

“If the heavily burdened nursing staff can be relieved of unrelated jobs, if the so-called „front office“ of medical care and nursing is supplied reliably, economically and in a quality oriented way by a well-organised, competently trained and motivated „back office“, the nursing will improve in quality, medical practice, especially in the area of infection control, will become safer, and the patient will be better cared for.”

Management in Hospitals 2013

System in transition, from the „classical form of organization” to functional area separation

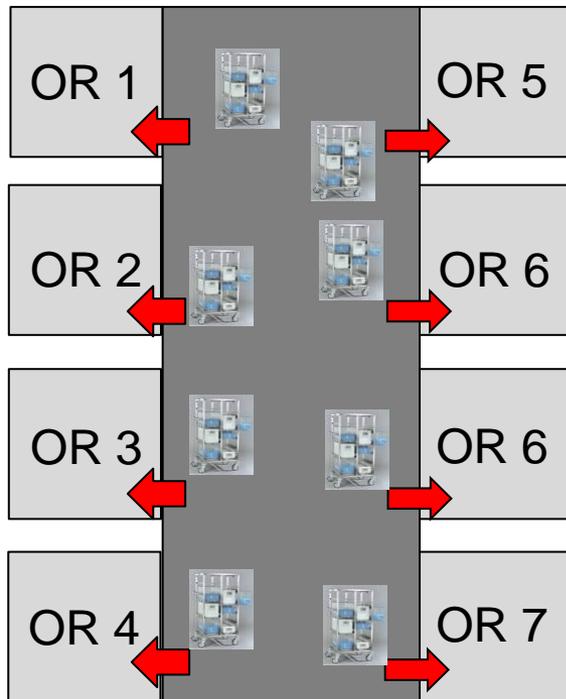
Functional area separation in planning:

Since January 2014, a so called “Logistic Group” is installed into the Central Operations Department (COR).

The tasks of the logistics group are:

- inventory management of all COR-stocks (instruments, disposables, medicaments, implants, cloth, etc.)
- ordering management
- preparation and provision of case-related „case-carts“
- booking and documentation off all used articles per operation
- rebooking into the stock-system, if provided articles have not been in use
- Preparation of case/patient related accounts

Functional area separation in planning



No stock between the Ors,
„case related“ carts for each
operation



Functional area separation in planning

What is needed?

- Staff (this time 22 employees, required training: logisticians in healthcare)
- EDP (logistic-Software, book-keeping-software, OR-planning-software, parts lists)
- Databases for all software-systems
- Special „case carts“
- Coding-systems for all needed devices (including instrument-sets and single reusables)

COMMUNICATION! Between all involved parties

Functional area separation in planning

Databases (1):

A standard for all consumables (reusable and disposable) for each operation which is offered in the hospital from “a” like “appendectomy” to “z” like “zona orbicularis resection” . This standards are not easy to create, because each surgical operation is individual, each patient (case) is different. And, by the way, each surgeon is different.

Functional area separation in planning

This for, in the first planning of the „case carts“, all **possible needed materials** must be planned and provided.

After the operation, all materials which have been not in use are booked back to the system.

After a evaluation-period, the standards can be adjusted.

Possible advantages (from the perspective of the CSSD):

Contents of the different instrument-sets are „slimmed“, additional small sets can be created on a solid database (objective information).

Functional area separation in planning

Databases (2):

Stocklist of all materials, which are needed in an OR.

- Instruments (sets and „singles“)
- Implants
- Consumables (from draping to sewing)

with a permanent inventory

Databases (3):

Material storage space must be also computerized.

All articles must be found and stored without „elite knowledge“

Databases (can be continued...)

The hospital as an enterprise

All organizations align themselves according to their priorities.

This also applies to the total hospital organization with its various organizational units.

The priorities of the individual organizational units are not identical with the priorities of the entire company.

The hospital as an enterprise

Especially for non-medical people, it is a challenge to understand the clinic's internal mechanisms and hierarchies.

Without an understanding of **medical processes** and the **interfaces between curative and administrative activities** even the most spirited entry will not take effect:

Successful Management in Health Care is the knowledge of the core business ahead.

The hospital as an enterprise

The approach of the major service providers in the hospital - doctors and nursing staff- differs substantially from the point of view of the management of a clinic.

In addition, both viewpoints are not entirely congruent with the objectives and expectations of patients.

The hospital as an enterprise

The objectives to be achieved with the new organizational structures are manifold:

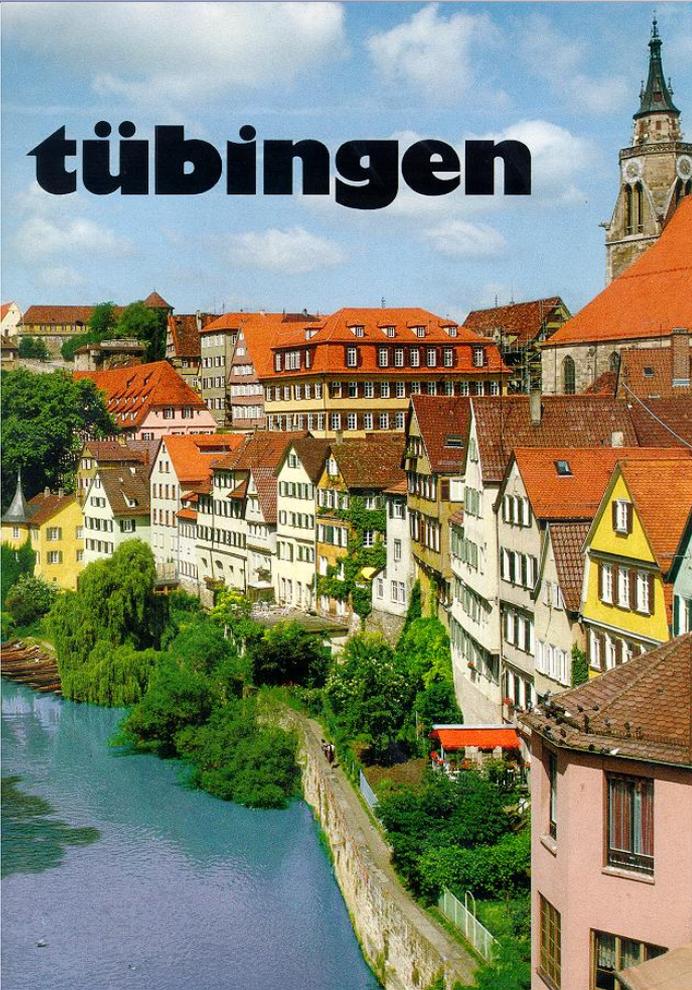
- enabling a holistic, integrative treatment process
- ***increase the economic efficiency of the treatment***
- improve the quality of medical care
- increase the patient / customer orientation by overcoming interface problems
- competitive differentiation

The hospital as an enterprise

Case-related provision of reusable medical devices and disposables in an operation theatre can be **one** step, to reach the objectives.

Beside the technical equipment, a high flexibility of all involved employees, from nursing, logistics, CSSD, facility management to the medical staff, is the indispensable prerequisite, to implement the plan.

The common goal should be, attempt abolish the strict separation of functional areas in parts and to link the distributed responsibilities and processes of the classical form of organization in the best way.



**Thank you very
much for
your friendly
attentiveness**