Decentralized Functions

- Center Kitchens / Cafes
- Medical technology and General workshops
- Cleaning Bases
- Service desks in center receptions

Supply Principles for St. Olavs Hospital

1. Transportation Principle
2. Supply Principle
3. Information Principle
4. Production Principle
5. Modular Principle
6. Organization Principle

6 principles for logistics and flow of goods

1. Transportation Principle – Automated systems for goods and waste, including Automatic Guided Vehicles (AGV), Pneumatic tubes and Waste blower.
2. Supply Principle – One common dock and at most 2 levels of storage
3. Information Principle – IT-based ordering, purchase, stock control
4. Production Principle – co-location of core production
5. Modular Principle – consistent modules for transport and storage
6. Organization Principle – No health care providers involved in supply unless there is a medical reason

Facility Services Vision

- St. Olavs Facility Services shall be a leading full service supplier of non-medical services for healthcare institutions in Middle Norway, and be a natural first choice for our customers
St. Olavs Facility Services shall be:

- **Big-minded**: show enthusiasm; give attention; be involved, down-to-earth and perform better than expected.
- **Environmentally conscious**: contribute to continuously improving the environment; in-doors and out-of-doors

Quality Targets

- Services rendered, timely and in the right place
- Risk Analyses
- Customer surveys - customer satisfaction
- Positive colleagues; team spirit
- Cost management

Model of a system for process based quality management

Business Model

- Service Level Agreements (SLA)
- Budget constrained service offering
- Competitive - and correct prices
- Cooperate with clients; client meetings, client surveys

Calculating Prices

- Salary expenses
- Operating expenses
- Expenses internal to Facility Management
- Common operating expenses
- Financial expenses
- Depreciation

**Calculation Basis**

- Billing percentage
- Hourly Rate
The departments of St. Olavs Facility Services

- Plans services
- Delivers planned services
- Verifies quality of services

Food and Café

“Food will be ready momentarily”

- Supply Kitchen
  - Hot kitchen
  - Diets
  - Catering
- Center kitchen
  - Department Kitchen with buffet
- Cafes

General Technology

Activities:
- operations
- maintenance
- project management
- design management
- construction management
- consulting

Sterile Supply

Activities:
- Sterilization of surgical instruments
- Packing and handling sterile goods
- Purchase and ordering
- Tracking sterile goods
Service Center
- The face of St. Olavs Facility Services – our shopfront
- Receives all orders from customers, registers and coordinates
- Switchboard, production of ID cards, etc.

Medical Technology
- Unique competence on the entire range of medical technical equipment at St. Olavs Hospital
- Maintenance of medical technical equipment
- High technical subject competency
- Advisors during testing and purchase of equipment
- Database over medical technical competency for each employee
- Central workshop and satellite shops in each center

Payroll & accounting
- Payroll and accounting services:
  - accounting, salary management,
  - processing travel compensation, annual accounts,
  - consulting, training

Documentation Center
- Medical Records archive
- Common typing and follow up services
- Document management
- Archiving
- Routines for journal keeping

Working Environment Dept.
- Physical and psycho-social work environment
- Worker's medical care
- Contagion protection
- Alcohol and drug prevention
- Training courses
- Participate in committees - building new work areas

Logistics and supply
- Purchasing, acceptance and storage
- Purchasing / stock management of department specific goods
- Laundry management
- Mail service
- Transport between main storage and loading dock
- Active supply - supply team
- Consulting
Cleaning

- Daily cleaning
- Monitor cleaning
- Periodical cleaning
- Acute cleaning
- Operation Room cleaning
- Decontamination
- Laboratory and special cleaning
- Main cleaning

The new Hospital 2010

Advanced digital infrastructure and technology.

Examples:
- Visualization in the OR
- IP-phones and nurse call
- Patient terminal
- Queing system
- Voice recognition
- Automated logistics

Also:
- ID-cards
- Electronic record
- PoCCS – research

Advanced logistics systems

Staff’s clothing

Garments with RFID-chip

Antenna in the cabinet to read RFID-chip.
Waste - suction

Waste suction for 4 types of waste:
- Regular garbage
- Paper
- Confidential paper
- Plastics

Waste piping: 500 mm. Chute opening: WxH: 500x700 mm. i.e. regular plastic waste bags can be thrown into waste chute

Automatic Guided Vehicles – AGV

- Investment - 55 million NOK
- 21 AGV operational fall 2010
- AGV makes about 650 round trip transports each day
- AGV system requires 4 positions
- AGV is operational 14 hours / day Mon-Fri
- Supply team in each center
- Transport plans for each type of goods transported by AGV

AGV transportation has meant:
- Released resources in clinical departments
  - Reduced storage needs
  - Reduced cost of goods
  - Reduced purchasing costs
  - Changing tasks for FM staff

Single Room with Patient Terminal

Spaces for Health - art and natural materials - Neuro Center lobby

Green Hospital – atrium and roof gardens with play area, Women-Children Center
Official Opening - 2010 June 12

GREEN HOSPITAL - willow commons in Olav Kyrres street

Challenges for St. Olavs Facility Services

- Competency Development
- Work certification
- Absenteeism
- Attitude development
- Client communication
- Quality measurements
- Team spirit
- Improved efficiency - benchmarking

Olav Kyrres plaza

The changing world in the Hospital Facilities Management Department is facing new demands and require a business approach to management and further development.

What is the management mechanisms, events, improved quality, better effectiveness, innovation and competiveness?
Orchestrating creativity-boosting collaboration – a fruitful approach to improved, competitive Hospital Facilities Management Department?

Aim of presentation

Discuss the idea of improving hospital running by orchestrating a continuous creativity-boosting interplay of people across fields, activities, and departments.

Structure

Three principles for orchestrating creativity-boosting collaboration

The theoretical framework

The principles at work

Empirical examples from a successful innovation project in a large industrial company

Bringing the principles into play in hospital running: A promising idea for improved quality, better efficiency, competitiveness and innovation?

Discussion

Principle no 1 Diversity of competence

- An organization’s diversity of competence must match the variety and complexity of pertinent problems

(Nonaka and Takeuchi, 1995; Morgan, 1997)

- Diversity stimulates creative abrasion

(Leonard and Swap, 1999)

Principle no 2: Redundancy

Parallel processing

In-house project team

External researchers

Stress analysis of dies

Principle no 3: Arenas for collective learning and reflection

(A Greenwood and Levin, 1998)

- Arenas are locations where the involved actors encounter each other in a material setting to discuss pertinent problems
- Face-to-face meetings
- Conferences
- Task force meetings
- Etc.

Team meetings
- Research-industry workshops
- Direct research-industry collaboration in the problem owner’s setting
- Joint research-industry verification and validation of research results
- It works!
- OK, back to the grindstore!

The HFMD

quality management increases PERFORMANCE in the business, including improved quality of deliveries

HFMD Goals defined in 2002

- Deliver professional products and services to the core activities at St. Olav's hospital (and other relevant customers)
- Be able to compete in an external market
- Become a business unit by creating income from selling services and products
- Be managed on a net-result basis that will be controlled as separate, independent business units.
- Create prices based on actual costs including the cost of capital

The collaboration tool
Business procedures

- The mechanisms of ordering services
  - The authority to order and the responsibility of the customer
- Service overview
  - Making concrete agreements and clarifying customer needs
- Control and evaluation
  - Supplier and customer clarifies cooperation and contents of the services on a yearly basis

Collaboration

High quality contractual agreements (involving "simple difficulties" and "hard difficulties"), requires understanding of

- The principal’s business (revenues and costs)
- The existing risk picture
- The supplier’s abilities and wishes
- The customer’s abilities and wishes

Making agreements is a “team effort”

Customer Relations - Collaboration routines

The preparation of the information program

Presentation material and brochure: For the Clinics – training department leaders to make the presentation

Presentation Material: For the Sales meetings with the clinical department. Clinics individually (10 units * 16 clinics)

Review and preparation of department leaders, sales are planned in detail for each customer (activity based)

Customer Relations - Collaboration routines

Scheduling the meetings and participants

Updating the service descriptions

Improve accounting system and reports Basis for reporting to customers and follow-
Preparation of estimates
  - New calculations based on the sales meetings
    - Simple system o correct for the customer needs

Improvement Projects

1. Implemented systems for Quality Management (ISO 9001: 2008)
2. Branding and marketing
3. Efficiency improvement
4. Web-portal & IT-projects
5. Customer Front desk
6. Orchestrating Customer Relations i.e. each department has a collaboration routine with the clinical departments

Events & results

Established all necessary contractual agreements with the customers for every department in the HFMD.

The agreements is the HFMD-departments business and legal basis for it’s activities.

The contract is the central part of the respective department’s business/market plan and regulates the collaboration with the clinical departments and external deliveries.

Moved the working culture from being based on executing public tasks (and say yes/no to customers) to be based on income from demanded customers services

All units in the HFMD have had a thorough review of their business and have specific descriptions and calculations of each service they deliver.
Events & results

1. Monthly financial statements reporting both income and cost have given departments leaders the opportunity to evaluate the economic performance of their services.
2. The departments can more easily measure and compare the performance of their workforce.
3. Due to the internal pricing of every service/product, HFMDs customers are more aware of their orders and the cost of their demands.
4. HFMD can compare their prices and services with external providers.

Need to be done continuously

- Coaching leaders
- Awareness to customer relations
- A wide variety of perspectives and motivation among leaders and workers
- Consciousness of individual performances

Thank You