

THE MAKING OF A COMPETITIVE HOSPITAL

INVOLVED SENIOR LEADERS / ADVISORS

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INNOVATION AIMS

Dutch Health Care Reform urges the hospital to innovate.

The aim of Atrium's innovation is to improve effectiveness, safety, timeliness, patient centredness and efficiency.

KEY INNOVATION METHODS

- Redesign of main patient care processes by multidisciplinary working groups aiming at:
 - Applying best insights and techniques of health professions
 - A decrease of the number of steps in the care process
 - An increase of the value added per step
- Introduction of process scheduling
- Spreading of best practices from one to similar places in the hospital by experts after positive evaluation of a pilot phase
- Monitoring improvement by quality indicators
- Clinical research to assess the effectiveness of new techniques

CHANGE STRATEGY

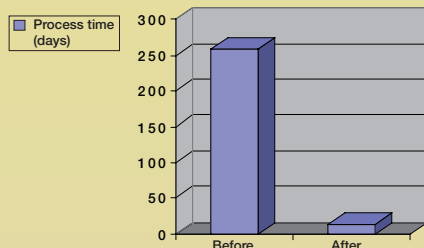
The main strategy at the hospital level includes:

- Open communication on quality indicators to all
- Agree aims, not means
- Provide help on methodology and change
- Mainstream: make use of the organizational structure and its systems
- Enhance innovation capacity at hospital and division level

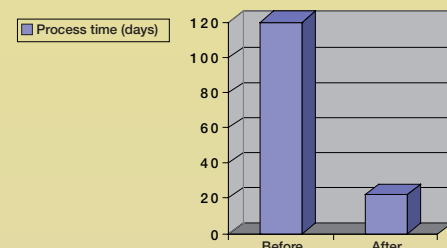
IMPROVING TIMELINESS

Reducing waiting times, process times and length of stay in order to provide care on time for all patients.

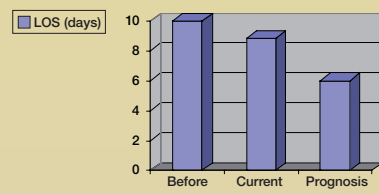
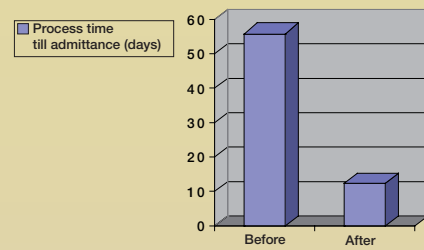
Arterial diagnostics



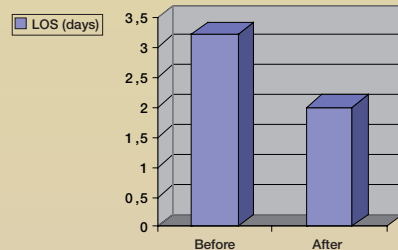
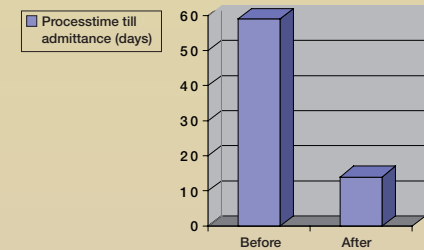
Varices diagnostics



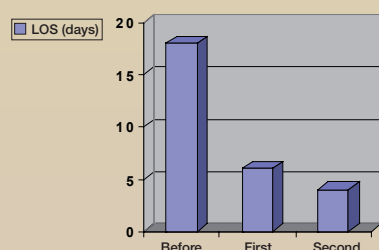
Colon Cancer Diagnostics & Intervention



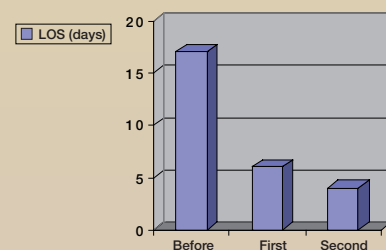
Cholecystectomy



Total Hip: LOS before process redesign and after first (realised) and second (prognosis) redesign



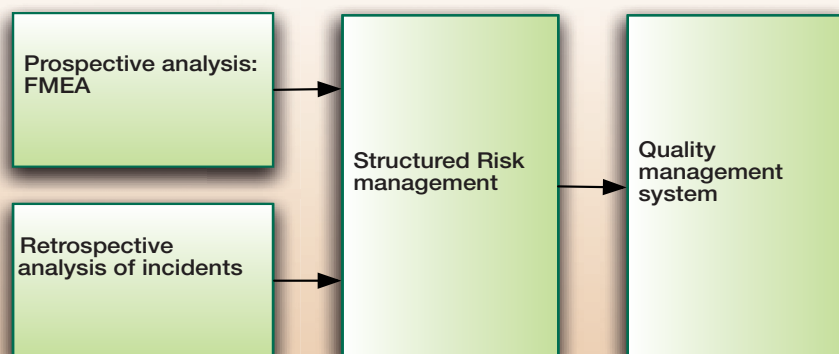
Total Knee: LOS before process redesign and after first (realised) and second (prognosis) redesign



The strong reduction of process time results in decreased access times. The improved performance is highly appreciated in the market.

IMPROVING PATIENT SAFETY

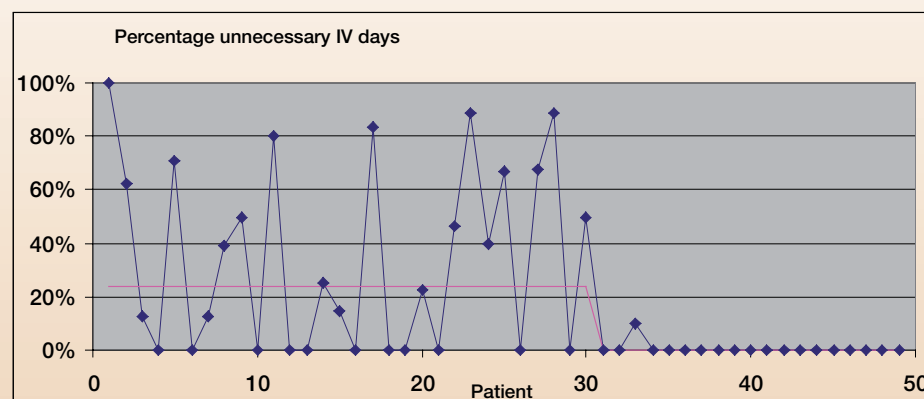
Developing and spreading a safety management system



Model: N. van der Hoeft, M.C. de Beukelaar, A. Krings, N. van Weert, 2006

RESULTS

- Retrospective analysis based on non-punitive report system is in place in 3 teams.
- Structured risk management is in place in 3 teams and their leaders.
- Failure Mode Effect Analysis (FMEA) is applied to the process of drug distribution (from prescription to administration) (Krings & Van der Hoeft).
- The drug distribution FMEA was followed by several innovative actions among which standardization of products, satellite pharmacy and drug prescription data exchange (Krings, van Weert)
- Some figures on antibiotic drug administration:

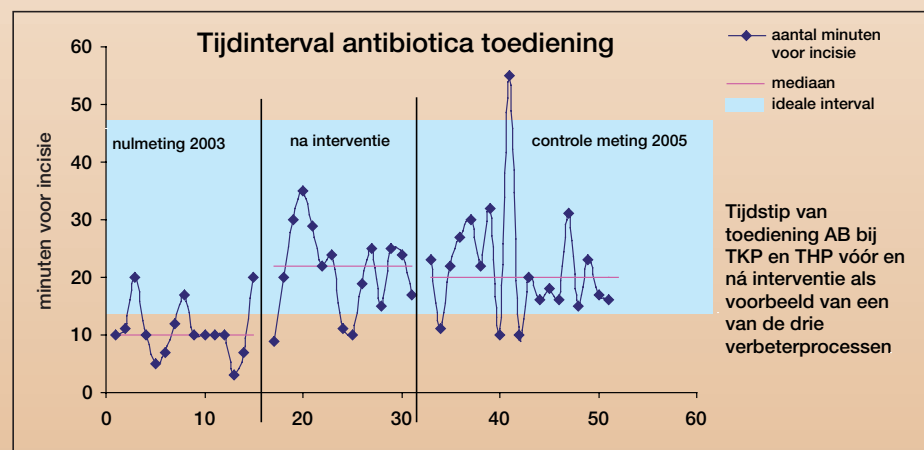


Switch of antibiotics administration from iv to oral

Source: Bollen, Krings, Wagenvoort, Van Wanrooij

The figure shows the results of a surgical ward.

Current participation: 5 wards.



Prevention of surgical site infections

Source: Heijligers, Sprangers, Olislagers, 2005

The figure shows the results in antibiotic prophylaxe in orthopedic surgery. Other interventions relate to shaving and OR i/o.

Current participation: all 8 surgical specialties.

EFFICIENCY

The optimization of the patient care process results in cost-reduction.

RESULTS

- In the diagnostics and treatment of colon cancer the net cost savings amount € 950,- per patient (Nap, Vaessen, Van der Bijl, Sosef, Van der Schaar, Wals, Platteel, Walta)
- Redesign of the cholecystectomy process resulted in net cost savings of € 370,- per patient (Bollen, Zuiderent, Driessen)
- Cost savings are anticipated in total hip replacement and total knee replacement (Meijers, Joustra, Staassen)
- Business Cases are being built for the reduction of decubitus and surgical site infections.

IMPROVING EFFECTIVITY

The effectivity is being improved by introducing proven health technology, which was not yet applied or just reached a few patients. Clinical research is initiated to evaluate techniques yet to be proven.

RESULTS IN VASCULAR CARE

- Vascular risk factor management is now applied to all patients referred to Atrium Vascular Centre (Teijink, Graal, Van den Berg)
- Supervised exercise therapy was shown to be effective and successfully introduced. (Teijink, Bendermacher)
- The FAST-test was developed and introduced to help recognize stroke in the community. This enhanced the chance for effective trombolysis (Franke)

IMPROVING PATIENT CENTREDNESS

The way patients experience the care given is continuously evaluated. Redesigned processes are appreciated for the predictability and short access times. Patients and their spouses easily collaborate in the process when asked and instructed to do so. Patients are sensitive to insufficient implementation of a new design.

RESULTS FOR ATRIUM

- Centrameter Award for best patient safety. Based on hospital benchmark study 2003.
- NIAZ Hospital Accreditation, 2003.
- Top 5 position in national ranking. Based on quality indicators 2004.
- Preferred supplier status 2006.

MAIN COLLABORATION

- Faster Better Pillar 3 (Sneller Beter Pijler 3)
- Clinical Pathway Network
- Association of Teaching Hospitals (STZ)

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