

19. Optimus, prototype of the integral surgical environment at Hospital Clínic in Barcelona

MUNICIPALITY

Barcelona

HEADING

The Faculty of Medicine of Hospital Clínic in Barcelona in collaboration with Optimus Services AG, an emerging Swiss company, is working on the first integral re-design of the operating theatre model in the world since the Second World War.

IDENTIFYING DETAILS

The advantages of the new integral surgical environment can be focussed on the following aspects:

- Improved safety and reduction of surgical infections.
- Greater operational efficiency and therefore lower surgical costs.
- Improved per-day performance of equipment and annual capacity for operations.
- Improved equipment reputation thanks to improved safety and quality of treatment.

PROJECT DESCRIPTION

All round the world, health centres are facing serious problems due to the increased complexity of health systems and growing financial pressure. Concepts like the integration of "model" systems into centres' structural design, homogenisation of information systems and "efficiency-by-design" represent new focuses that can reverse this trend, while managing to ensure continued technological progress in the field of medicine. At the same time, increasingly complex medical care technologies and systems have increased situations of risk in many areas, including intra-hospital infections, information system errors, and problems concerning technological safety.

The new operating theatre, the Optimus "integrated surgical environment", whose installation will be complete in April 2014, represents world leadership in innovation in the health care sector. Members of the University of Barcelona's Faculty of Medicine, the Karolinska Institute of Sweden, Olympus Medical, Philips Color Kinetics, and SONY Medical will be involved in testing and validating concepts like the following:

- Environmental sterility.
- Elimination of risk through "safety-by-design".
- Improved and safer performance, with cost control, thanks to "efficiency-by-design".
- Simplification of a complex system by systematic elimination of structural redundancies and homogenisation of medical user interfaces.
- Creation of a calm environment for operating theatre patients and staff.
- "Total integration" (information systems, medical teams, electro-mechanical and air conditioning systems, etc.)
- Integral focus of the operating theatre.

During 2013 and the first months of 2014 the electro-mechanical installation of the new operating theatre at Hospital Clínic in Barcelona was completed, and integration of the Optimus programming and its checking continued. During the second quarter of 2014, the clinical validation programme of the surgical installation will begin.

PROJECT ADDRESS

www.optimusise.com

RESPONSIBLE

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