# **Expanding Possibilities with SurgiCube®**

Leiden University Medical Center (LUMC) in Leiden, the Netherlands acquired a SurgiCube® to provide extra surgical capacity for Ophthalmology procedures. Professor Nicoline Schalij-Delfos, who has been an Ophthalmologist, specialized in pediatric ophthalmology at the LUMC for 16 years, explains how the specialists at the LUMC contributed to the development of the SurgiCube®.

"We were introduced to the system by Wim van Galen, manager of the nursing department." said Professor Schalij-Delfos. "We wanted to have the SurgiCube® in addition to the general operating theatre, as Ophthalmology procedures are generally some of the first to be rescheduled when the operating room program is very busy with emergencies."

# **Ensuring Safety**

Before acquiring the system, the Ophthalmology staff were unsure if the SurgiCube® would be sterile enough for operating purposes.

"Infection is our biggest threat in the operating environment. So, when we acquired the SurgiCube®, we evaluated the sterility of it through several studies to double check that aspect," she said.

Working in the SurgiCube® met the Ophthalmology Team's expectations.

"The SurgiCube® works well and I enjoy using it," Professor Schalij-Delfos added. "I was surprised how the system could provide a sterile operating environment in almost any setting."

# **Developing Initial Prototype**

After some initial use of the then, very new SurgiCube®, some of the LUMC Ophthalmology staff became involved in adapting the original prototype system.

"We were very involved in the development of the SurgiCube® and enjoyed contributing to the process. It was very exciting," said Professor Schalij-Delfos. "The initial system was a very small unit. It was not suitable for our role as training centre for cataract surgery. We helped in developing a larger one. We also carefully considered the space available in the system and taped out the positioning of the personnel and the equipment on the floor, for example, where the table and patient bed should be within the SurgiCube®, so that everything was placed for best airflow coverage and ideal ergonomics within the unit."

#### **Practical**

Professor Schalij-Delfos finds the logistics of the system practical. It is located outside the operating theatre in an area dedicated to day-care surgery where patients are prepared for surgery and treated in adjacent rooms. Apart from cataract surgery, all kinds of ophthalmological procedures under local anaesthesia such as eyelid surgeries, biopsies and simple types of glaucoma surgery are carried out in the SurgiCube®.

"Because of the SurgiCube® we can continue to operate in the treatment center. Surgical time is reduced and the patient has a more positive experience and less stress," she said.

"I like working with the SurgiCube®," she added. "And helping to develop it, back in 2006, provided a new and interesting challenge."



# Quote

"I like working with the SurgiCube®. Helping to develop it back in 2006, provided a new and interesting challenge."

Professor Nicoline Schalij-Delfos, Specialist Ophthalmologist at Leiden University Medical Center (LUMC).

# **Professor Nicoline Schalij-Delfos**

Professor Schalij- Delfos is an Ophthalmologist based at Leiden University Medical Center (LUMC) in Leiden, the Netherlands. She is the only Professor of Pediatric Ophthalmology in the Netherlands. The Professor works across the full spectrum of her specialism. Her surgical expertise is pediatric lens surgery, complex cataract surgery in adults and strabismus surgery. She is recognized nationally- and internationally for her work and has published more than 45 papers and several book chapters, and is a Member of the American Academy of Pediatric Ophthalmology and Strabismus (AAPOS) and former president of the European Pediatric Ophthalmologic Society (EPOS) and the Dutch Work Group for Pediatric Eye Care (Werkgroep Kinderoogheelkunde). Professor Schalij-Delfos is also a reviewer of articles for several, well-known, national- and international-scientific journals.

# **Publications:**

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#### 2017

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