



In the simulation section with five plus five spaces, students practice in a work environment that is very similar to an actual clinical environment.



Polktandvården's (Swedish National Dental Health Service) 3000 m² basic training clinic for adult dental care students underwent a complete renovation in 2011. The need for the remodeling arose from the increasing number of dental and dental hygiene students being taken in each year. Also, clinical training starts earlier in the new dentistry curriculum.

"The training is being expanded and we were looking for solutions to maximise the number of work spaces," explains Ms. Åsa Leonhardt, associate professor and head of Folktandvården's training clinic for adult dentistry.

"The real challenge for us now is that we are in the middle of a transition period between two different curricula," she continues. "Since the students now come in contact with patients earlier than previously, we need both more patients and more treatment spaces."

#### More room

The most notable aspects of the change are the lighting, the open spaces, and the fresh color scheme. The clinic's new section has a total of 70 treatment spaces with the most modern equipment in Sweden: 40 simulator spaces and 30 treatment spaces. Of the latter, 24 spaces are in large teaching halls and six are in smaller training rooms, one of which has a video camera.

Each day, this section fits approximately 100 students and patients, and roughly 60 clinic personnel (20 nurses, 6 hygienists and 30 dentists as well as administrative personnel and clinic management). It is obvious that scheduling is a challenging puzzle.

All 30 treatment spaces are equipped with **Planmeca Compact** i units with LED lighting, Planmeca dental chairs with standard upholstery and soft headrests in a Tempur-Pedic material, saddle chairs, and dental stools.

### A modern simulation clinic

"When the renovation group was looking for new equipment, we looked for a simulation clinic that was similar to the actual clinical situation and that provided a large number of spaces," says Leonhardt. "We needed to be able to accommodate as many work spaces as possible in as small an area as possible, both for dental hygienist training and dentist training."

Aiming to find a modern simulation clinic, the choice fell to Planmeca Compact i, clinical simulation. Students work on a dummy with a torso at a real dental unit. This solution saved a lot of space at the clinic.

### Ergonomic design and authentic environment

Plameca has brought simulation to the same level as the most popular unit sold, the **Planmeca Compact** Touch. This includes a touchscreen instead of push buttons and LED lights instead of halogen lighting.

The unit is easy to use, displaying clear symbols and text instructions. Each work space is equipped with a display screen for working with data records and for showing demonstration films.

"It's wonderful that we are investing in the students and can provide new innovations for training," says Åsa Leonhardt, who feels that it is a strength to be able to show demonstration



Tomorrow's dentists work with the latest equipment right from the start.



films during training. "The best part is that the students are in a simulated setting right from the start and can follow hygiene procedures, data records, etc. We have also been able to increase the number of spaces from 18 to 40 – now there are four sections with 10 spaces each. It works really well with double units," she thinks. Despite the minimal space, instructors have easy access.

## Good infection control routines right from the start

The simulation unit can be run with **Planosil** to regularly clean the biofilm from the water lines. This type of cleaning is not very common in a simulation environment, since many people think that bacteria in the mouth of a dummy do not matter. But this ignores a large part of the idea behind water cleaning.

Naturally, you want to ensure that patients don't get bacteria in their mouths, but equally dangerous — if not more dangerous — is the bacteria in the spray that healthcare workers breathe in daily. And this is the case even if

you are working in a simulated environment instead of on a real patient.

### Mission impossible – possible

The entire renovation was a joint project between Folktandvården and the Institute of Odontology. A project group consisting of personnel from the adult clinic worked with the architect to implement the work.

"During the construction period, the clinic was closed for only five weeks," explains Åsa Leonhardt. The student schedule was highly compressed, but the stipulation was that we must keep going. The clinic tore out the old decorations, created new drawings and color schemes via the architect, and supervised the renovation, decoration, and purchasing.

"It was very messy," says Ms. Ann Jonsson, the clinic coordinator and central contact. We were enclosed in plastic with dust and noise, and at times we doubted that we could maintain the time schedule. But it was also fun to be a part of the project, and it is wonderful to work with modern equipment. It makes a big difference.

### Continued future focus

Thanks to investing in units with the Clinic Edition software program, the work process for the unit can be monitored.

"We look forward to taking full advantage of the benefits," says Åsa Leonhardt. This includes the maintenance service and hygiene care, but first and foremost the options for tracking students' progress. In the summer, we will begin using digital X-ray units and sensors, as we anticipated," says Leonhardt proudly.

# PLANMECA COMPACT I CLINICAL SIMULATION – CLINICAL ENVIRONMENT FROM THE VERY BEGINNING

The aim is simply to other the students a work environment that is as close to the clinical environment as possible," explains Mr. Jens Hendrén, Export Manager at Planmeca Oy.

Traditionally, simulation environments were built around laboratory desks with an added torso, and working with a torso was very different from working with a unit.

Our simulation unit, which has a unique design, provides an environment that is very close to working with an actual unit, so that you can learn the correct ergonomic working posture righ from the start. For the student, the transition fron preclinical to clinical work is smooth, which in the end results in better care for the patient in the



Two out of a total of four simulation sections can be seen behind the conference table.