

## Ergonomic Furniture Gains Importance in Filmless Environment

When it comes to planning radiology department needs, furniture used to be on the bottom of the list. Today, as more thought is given to maximizing work space and providing better ergonomic working solutions that are flexible and more comfortable for a variety of radiologists, furniture has become an important component of the planning stage.



Montefiore Medical Center in New York was the testing site for prototypes of the AFC Ergo Tier workstation, which they now use throughout 14 reading rooms.

The switch from a film-based environment to a filmless environment is driving many healthcare organizations to rethink the workspace and what goes into it. They are recognizing the positive impact well-designed space and furniture have on workflow and productivity. Many are choosing to not just hop along with what's left over from the days of film, but rather are considering furniture options during the same time they are selecting PACS. Reading room furniture is no longer an afterthought — it's an essential piece of the planning puzzle.

### Ensuring ergonomic solutions

Planning was a comprehensive internal process that included research and study at Montefiore Medical Center in Bronx, N.Y. With two hospitals, 60 radiologists and 14 reading rooms, there were many issues to tackle and people to make comfortable at their workstations.

"We looked at the ergonomic issues regarding workstations. We had a musculoskeletal radiologist, a rehab spine doc, an architect and an engineer all working together," says Nogah Haramati, MD, the hospital's chief of radiology and professor of clinical radiology and surgery at Albert Einstein College of Medicine.

They reviewed some 3,000 articles on computer-based reading stations and found that the chair was the most important consideration. "We spent a lot of time focusing on the chair and the parameters related to the chair," he says and selected a Zoom ergonomic model. Notable requirements include the ability to adjust the arm rest and the seat back, and it must have wheels and be able to swivel.

Turning their attention to the table, they worked closely with AFC Industries over a

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Nogah Haramati, MD, chief of radiology,  
Montefiore Medical Center, Bronx, N.Y.

Nogah Haramati’s office >>



nine-month period testing a number of prototypes. Their testing resulted in the development of the AFC Ergo Tier workstations.

The facility began the switch to digital imaging in 2002 and by August of that year they were 80 percent filmless, although they were still working with a fairly traditional reading environment. Over time they transformed the reading rooms to all have the same layout and AFC furniture and partitions.

### Balancing user, facility needs

The process of designing just the right table meant balancing the needs of the user with the needs of the facility. “You have to pay a lot of attention to user comfort. The real secret of ergonomics is comfort. It’s not about flashy looks,” Haramati says. Much of that comfort comes in the way of what is adjustable and the shape of the desk. “We actually ended up with a shallow curve which is what the users preferred, so they could rest their arms and have the keyboard close and move the monitors,” he says. Surface height, surface tilt, and monitor position can change with the touch of a button to easily accommodate any clinician’s height.

“We also found some radiologists had back pain and spinal problems and so working in the sitting position might not always be the best, so we wanted an environment where the table could be brought up and the user could stand.

When a user stands, the tables would have to be at one level for that user, but the monitor would have to be in a very different level, so even for the same user, the monitor may have to be raised and lowered. That’s why the monitor and the tables need to be able to move independently,” he says.

To meet facility needs, Haramati knows the furniture must be able to move since it’s common to relocate reading rooms. “The tables are all on wheels, the partitions are all movable—everything is movable,” he says. “Even when the hospital said ‘this is your reading room,’ we knew that they would be moving us.”

He adds that being able to move the furniture is based on being able to get it out the door. His doorway is 32-inches wide and he had his table made to be 24-inches wide, while standard tables are 36-inches wide.

### Knowing who is behind the product

It is important to look beyond the day-to-day furniture use and consider what the needs are when something stops working, Haramati says.

“These tables are all motorized, and when you are dealing with 60 motorized devices, some things stop working, and you need to make sure your company, whoever you buy from, has the wherewithal that when you call them up and you say, ‘hey something stopped, it’s not working,’ that they can either send you another, or send you replacement parts and instructions, so that one of your engineers can fix it quickly so you don’t get downtime,” he says.

### Gaining status

Furniture is clearly becoming more of a priority. Long work days looking at imaging studies on monitors drives the need for ergonomic comforts at workstations. Facilities are anticipating furniture needs in the planning stages and vendors are coming to the plate with attractive solutions that offer flexibility and meet needs. **HIJIT**