This is a story about one exam room. In one healthcare clinic. And how an “extreme makeover” for that room may have implications for exam rooms in clinics around the country.

The improvements in the room are simple yet innovative. The results are clearly impressive. It’s now easier for patients to learn and understand more about their health and the care they receive. The room also offers better support for the healthcare provider. Overall it’s a better healing environment for everyone involved.

And it all started with a challenge.
HISTORY AND SYMPTOMS

At a healthcare policy meeting at MIT in Boston, Neil S. Calman, M.D., President of the Institute for Urban Family Health (IUFH) in New York City, met Mike Love, President of Nurture, the healthcare division of Steelcase. Love shared an article with Calman about the SPARC Innovation program, an ongoing research and development department set up in part by Steelcase at the renowned Mayo Clinic in Rochester, MN.

“That’s a great program, but we’re not the Mayo Clinic. How can you help people like us?” Calman asked.

The nonprofit IUFH, begun in 1983 as a single clinic, now operates sixteen family practice health clinics in New York City. IUFH serves patients from diverse economic and social backgrounds ranging from the middle class to the working poor, to the homeless. They have high rates of asthma, tuberculosis, substance abuse and HIV, and many patients present difficult medical, psychosocial and economic challenges.

Caring for a medically underserved population, the IUFH is part community health center, part private physicians practice group. The institute treats patients of all ages, trains resident physicians, and is committed to not only providing excellent care, but also to changing the healthcare system.

The IUFH’s Sidney Hillman Health Center operates from a historic 112-year-old building on 16th St. in the garment district. Though the clinic needed renovation, the building’s historic designation limited major changes to the interior, and financial limitations precluded other major changes to the exam rooms.

DIAGNOSIS

In 2002, the IUFH became the first free-standing health facility in the New York State to implement an electronic medical record system. The purpose was to make the institute’s patient care process faster and more effective, but the physical space kept the practice from realizing all the benefits of their new technology and work processes.

“Electronic health records have a major advantage,” says Calman. “The patient and the health care provider can view the information on screen simultaneously. The patient is cognizant of a third party in the room, the computer, which can interfere or become part of the care delivery. It’s your record, and you’re invited to look at it, and it can be a tremendously helpful part of the care delivery.”

Doctors had no way to easily share the vast information resources they could call up on the monitor. In short, a cutting edge technology was thwarted by a poor physical environment.

“You can’t just look to technology for solutions. You need to look at the space, the work processes and the people, as well as the technology,” says Love. “If you just
look at one of those four elements, say, new technology, but you have other problems, you can end up with a faster bad process.”

“So we have to consider all four elements. We study the users, the facility, the technology, and the work processes, to figure out how to make them all work for the user, and then we develop a solution around their needs.”

TREATMENT
Alan Rheault, Nurture’s director of product development, talked with patients and staff to inform his design for a 21st century exam room in the clinic’s 19th century space.

“We spent a lot of time on the spatial relationships of the patient and the healthcare provider, and how they access information.” The central feature of most exam rooms is an examination table, but in the majority of patient visits the physician or nurse spends more time discussing the patient’s progress, reviewing test results, asking and answering questions. A physical exam happens in less than half of those visits. The patient-provider-monitor spatial relationship was key in this project.

“The exam rooms are pretty small, about nine by ten. Walls are concrete, so changing electrical is a huge deal.

Even installing wall-hung furniture is really out of the question. That’s why we chose modular freestanding furniture (Opus™ Casegoods).” Rheault took the concept of a half-round family conference table, miniaturized it, and added the Details FYI™ monitor arm. “Research shows that people learn more when they’re collaborating on the same level, side by side. Both the patient and provider communicate better and learn more.”

The Opus wall unit includes adjustable shelving, up and down lighting, sliding doors for access in tight spaces, and melamine surfaces for easy cleaning.

As the patient and physician review information on the monitor, a printer sits ready on the nearby shelf and Details Slatwall holds worktools behind the monitor. Nothing obstructs the view of the information on the screen, or the view that the patient and healthcare provider have of each other. Wheelchair patients can roll right up to the worksurface and enjoy the same unobstructed access as a patient seated in a guest chair.
Overhead shelves, comfortable Turnstone Crew™ seating, an Opus bedside table, and an exam table complete the room. To improve aesthetics and comfort, a number of simple interior changes provide dramatic results:

- A fusion architectural panel from Designtex conceals an old window air conditioner, yet allows air and natural light to come through
- Wood grain patterned vinyl flooring echoes the aesthetic of Opus’ surfaces
- A new cubical curtain of Designtex Rainfall fabric, a new coat of paint and inexpensive art prints coordinate with the existing tiled corner of the room

“We wanted the feeling to be very natural, more calming, more relaxing for the patient,” says Dawn Miller-Meister, an interior designer who helped manage the project with Rheault.

“You’re in the middle of a very urban, congested area, but the materials and colors bring in the outdoors, soften the mood in the room and make it a really comforting environment.”

OUTCOMES

The performance of the newly renovated exam room has been monitored carefully. Calman studied time lapse photography of doctor-patient interactions in the space. Staff and patients are regularly asked for feedback on the room. Hundreds of other healthcare providers have visited the clinic to see what’s going on. And no one can help but notice that patients often leave other exam rooms to use the new one.
“Everybody appreciates the ambience of the room,” says Calman. “Everyone is affected by the design of the room. The physicians love it; it’s their preferred room.”

When patients and care givers can more easily engage in discussion of their medical care, “it actually slows you down a bit at first, because patients ask more questions about things. But speed is not the issue. If someone understands their care better, you’re giving them something valuable. The next visit goes better, faster, and the whole process is improved. It’s a long term investment in the care you’re giving.”

Short term benefits present themselves daily. “I had a patient with heart failure in here yesterday. With heart failure your body is unable to get rid of the water it needs to, your lungs fill and your body gets swollen. I showed him a graph on the monitor of his weight over the past year, and details in his medical record. He said, ‘they told me the reason I have this is that I have a leaky valve, but I don’t know what a valve is.’ So I brought up a picture, explained what it was and what it does and printed the picture for him.”

“Patients understanding their care and their treatment and what they have to do is so important to a successful outcome. This level of interaction with people, being able to easily share information with patients, it’s exciting. It transforms the whole conversation.”

**PRODUCTS**

- Nurture Opus™ casegoods
- DesignTex Rainfall Cubicles and Fusion Grassland architectural panels
- Turnstone Crew™ task and side seating
- Details FYI™ flat panel monitor arm, Slatwall and work tools

For more information about The Institute for Family Health, visit www.institute2000.org

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