Designing the Perfect Health Care Clinic

By Elizabeth Svoboda

On a November afternoon, a wheelchair-bound woman rolls into Kaiser Permanente's Garfield Center in San Leandro, California, for a checkup. "Watch out for your arms, okay?" the nurse says as she guides the chair into the exam room. After consulting the sheet of paper in front of her, she peers at her patient. "Hmm. You look really good for 51 years old." The raven-haired patient -- obviously closer to 31 than 51 -- joins the nurse in laughter. "Thank you!"

That's one clue this particular doctor's office isn't what it seems. Others abound: the unfinished plywood walls, the scripts in the patients' laps, and the video cameras at every corner. The Sidney R. Garfield Health Care Innovation Center is a 37,000-square-foot stage -- a rehearsal ground Kaiser has created to perfect proposed facility designs before they are rolled out to Kaiser's hundreds of hospitals and clinics. Today, in a six-hour-long series of simulations, doctors, nurses, architects, and actors recruited to serve as patients are testing a microclinic design. The idea is to fit a complete-care environment into a space the size of a strip-mall store.

There are still kinks to be worked out, and they emerge as soon as the patients, doctors, and nurses enact typical clinic visits. "As you're checking in, how did that feel?" Angelene Baldi, a Kaiser medical architect and planner, asks the mock patients. "Did that work?"

One man raises his hand. "I couldn't figure out how to use the check-in kiosk. So I went to the window and finally someone came out and helped. I couldn't see the reception desk, nor could I see anyone to talk with."

Another patient chimes in: "I agree with him about the visibility. It was hard to tell that there was a receptionist."

"Maybe we need to somehow rotate the receptionist's desk so that it's facing the waiting area," Baldi says.

During the next round of simulations, the design team has put the patients' suggestions into practice. "Did it feel more obvious to have a person sitting at the desk there?" Baldi asks the patients. "Did it feel more friendly?"

"Yes," several chorus.

"Does that seem like the optimal placement?" Baldi asks. "Okay, good."
This is the future of health-care design, Kaiser style: patient-oriented, engagingly messy, and stubbornly results-focused. When architect John Kouletsis became Kaiser Permanente's director of strategy, planning, and design in 2003, an empty warehouse near Anaheim gave him an idea. "We said, 'We've got this warehouse -- why don't we do mock-ups of proposed designs for exam rooms there?' " he says. At the time, Kaiser was planning a $30 billion nationwide building push. "I thought, These new hospitals are going to last for 50 or 60 years," Kouletsis says, "so this had to be something that was very thoughtfully done." When he and his colleagues asked Kaiser doctors what they felt was the best way to design facilities from scratch, "the doctors said they wanted the Anaheim space, but on steroids," since the exam-room mock-up had gone so well.

Kouletsis took to the idea immediately: a central innovation facility near the Oakland airport that would evaluate not only new clinic and building designs but also the practical merits of new technologies poised to drive the health-care landscape of the future. His hunch was that extensive tests and mock-ups would yield a health-care blueprint that included the best designs, practices, and equipment available. By having mock patients test designs, Kaiser aimed to ensure the facilities met actual patient needs, not just the ones the designer anticipated. "The big dark secret is people award projects because they seem to be really cutting edge, but we're not really sure what cutting edge means," Kouletsis says. "So we said, 'Why not do something different?' "

When the Garfield Center began to stage the first full-scale mock-ups, in 2006, Kouletsis was shocked at the insights that emerged -- more and better ideas than anything he'd seen generated around a boardroom table. "When we built the 'movie sets,' people were suddenly opening up and sharing with us a ton more information than we'd ever gotten before."

The center's prototyping process is already bearing fruit for the whole Kaiser system: handheld computers that let nurses access Kaiser's electronic health records; a workflow system to reduce medication errors; and private rooms instead of wards in the neonatal ICU. Kouletsis says the center has enabled Kaiser to slash expenses in a variety of areas, including patient record keeping and facility construction, while maintaining levels of doctor, nurse, and patient satisfaction.

In one recent simulation, designers and health-care professionals set out to redesign headwalls, the wall-mounted nerve centers behind hospital beds that include call buttons and ports to plug in medical equipment. "We said things like, 'If as a nurse, you're taking care of your patient and they code, where do you want the button and the ports to be?' " Kouletsis says. "The nurses said, 'Could you please not make us bend down to plug things in?' So we moved all the plugs upward." The back-and-forth between doctors, nurses, and designers yielded a headwall that made everyone involved in the brainstorming happier -- and costs about $4,000 less than its predecessor.

Now Kaiser's competitors are taking notice. When Barbara Spurrier, administrative director of the Mayo Clinic Center for Innovation, found out what Kaiser was up to, she set up a March meeting in Minnesota with Kaiser officials to learn more about the Garfield Center's approach. "They have a strong commitment to patient-centered models -- thinking about patients as our partners," says Spurrier. She admires Kaiser's willingness to make lots of mistakes in the early stages of the design process, and she hopes Kaiser and the Mayo Clinic can team up on future innovation ventures. "When we get together, we can't help but imagine the what-ifs, and the energy is palpable."

The kind of creative energy that breeds runaway success, Kouletsis believes, can be unleashed only when health-care planners are willing to explore every option, no matter how unconventional -- and the evolution of the Kaiser microclinic seems to prove his point. Through dozens of full-scale run-
througths at the center that took place over the course of about two years, Kaiser has found ways to accommodate doctors in half as much space in a microclinic as in a hospital -- even as the clinics meet the health-care needs of 80% of the population and garner high ratings from mock patients. The pint-size clinics are set to debut in several states this year. "Traditionally, it isn't okay to fail colossally, and that encourages tiny changes, because you don't have the time or the platform to really test new ideas," Kouletsis says. "At the Garfield Center, it's okay to fail totally. Each failure teaches you what you can do the next time."