

**THE HEALTHCARE
EDITION**

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**Taking Care of the
Caretakers**

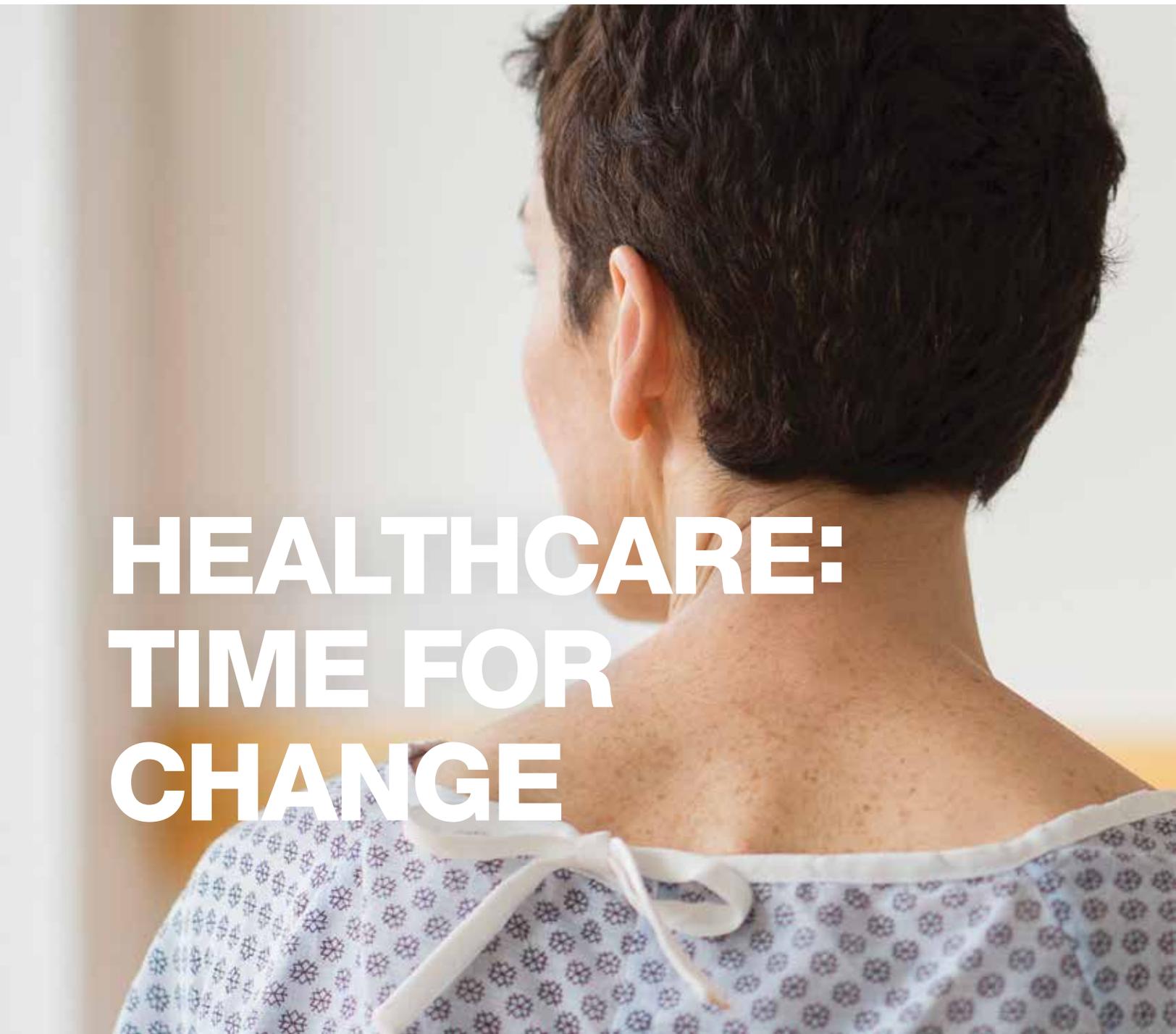
Privacy solutions for healthcare

Patient Rooms

A positive prognosis

**An Ecosystem of
Spaces for Infusion
Therapy**

360°



**HEALTHCARE:
TIME FOR
CHANGE**



About this Issue

Healthcare is evolving at a rapid pace, changing on almost every imaginable front, as patients and payors seek improved experiences, outcomes and value. Today's healthcare journey needs to be an integrated one – for patients, for their family members and for the caregivers.

At Steelcase Health we are continually working to deepen our understanding of the healthcare industry and the spaces where healthcare experiences occur.

This Healthcare Edition of 360 is a compilation of 360 stories that explore these insights and demonstrate how space can be used to humanize the health experience in waiting rooms, exam rooms, patient rooms, clinician spaces and infusion therapy environments to create places that deliver greater connection, empathy and wellbeing for everyone involved.

The Healthcare Edition

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more meaningful use of time. Read how to make every moment count, especially the transition moments when people wait in-between appointments, procedures and surgeries.



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Healthcare is high-stress, demanding work. Sometimes it's important to be able to get away from the hubbub around you.

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Many patient rooms are in need of a facelift, having evolved little over the years despite changing needs and new technology. As the next generation of patient rooms come onboard, new designs based on humancentric principles are improving patient, family and clinician experiences.

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Healthcare is rapidly changing. There are good reasons for exam spaces to change, too, connecting patients and clinicians in new ways.

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Healthcare

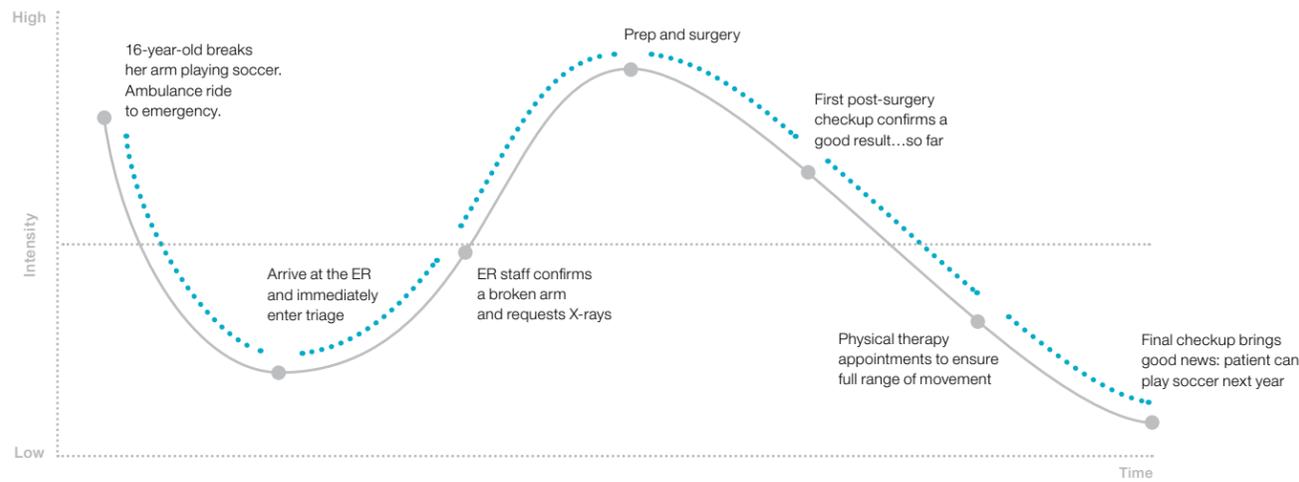
Making Every
Moment Meaningful

The healthcare industry is in radical transition. Rising costs and unacceptably poor outcomes are causing healthcare leaders to shift from an illness-based system to a wellness-driven model. New technologies, new processes and higher expectations of both patients and practitioners is challenging healthcare norms to adapt and improve. The need for radical innovation has never been more critical.

A study of the journey of patients, conducted by a team of Steelcase Health researchers, uncovered a significant opportunity for improving the healthcare experience. They observed how much time people spent waiting: waiting for direction, waiting for consultation, waiting for results. They saw people waiting and wasting the currency of our era: time.

One Patient's Journey

Key Moments



..... Transitions Moments
● Key Moments

There are transitional moments between key touch points in a patient's journey. Steelcase research identified opportunities where space could create a better experience through a more meaningful use of time.



The researchers saw this waiting happen repeatedly in spaces that offered little more than rows of armchairs squeezed into tight and dehumanizing formations.

They saw patients and their families awaiting critical information, anxious because they were in locations that were out of the sightline of the caregiver.

They saw people unable to perform focused activities or access medical information, and little or no emphasis on privacy, making technology accessible or providing comfort. And they saw no opportunity for people to connect with family members and caregivers in a private and respectful manner.

More often than not, patients and loved ones were placed in a holding pattern while they waited. In essence, time stood still. No thought or insight was given to how people might potentially spend their valuable time. The result was, and continues to be, a frustrating experience for the patient, and a lost opportunity for the provider.

"The fault lies in the fact that these transitional spaces, commonly called waiting areas, are geared towards a bygone era," explains Rob Heitmeier, general manager, Steelcase Health. "Smart phones, tablets and other emerging platforms allow people to do more things, from more places than ever before, and this has shifted user behavior significantly. Our expectation is that we can be productive and engaged from anywhere."

Because of these rapidly evolving technologies, our daily experiences are no longer tethered by time and space. Yet countless healthcare organizations seem unaware of how space, technology and information can converge to create new user opportunities. They are unaware of how the very space they occupy can enable people to get the most out of every minute they spend there. They are unaware that their space can make every moment meaningful.



So how do you make every moment count?

The key lies in understanding user behavior—the patterns of behavior from which insight-inspired design can emerge. The patterns the Steelcase Health team uncovered led them to think about the transitional spaces in a healthcare facility in a new and more thoughtful way.

The team observed that whether it's for five minutes or five hours, people of all sizes and physical conditions naturally seek comfort. It was also clear that people want choice and control over where and how they spend their time.

From a spatial perspective, this can be solved by providing multiple settings within a given space: offering areas for consulting with a physician, areas for watching instructional videos, areas for perching while awaiting key information, and areas for relaxing or even sleeping.

They observed very practical concerns, such as the need for a place for personal belongings in clear view and within easy reach. As well, everyone was looking for ways to connect—to other people and to technology. Another important observation—spaces were not flexible enough to accommodate family gatherings.

It was also clear that privacy was a major concern for people—spaces that provided enough privacy to share information comfortably and stress-free, but not so that individuals felt isolated.

According to the Centers for Medicare & Medicaid Services (CMS), “Patients and their families are essential partners in the effort to improve the quality and safety of care. Their participation as active members of their own healthcare team is an essential component of making care safer and reducing admissions.”

“We’re finding that connections with other people, information and technology also plays a role,” says Heitmeier. “And the process of getting better is no longer solely confined to clinical spaces.”

It was with all of these dynamics in mind—comfort, posture, sightlines, privacy and connection with both technology and people—that the Steelcase

Health research team embraced the challenge of how to design for spaces that make the transitional moments of patients ones that engage them and do not waste their time.

These insights served as building blocks for Regard™, a solution that gives people greater control over their transitional experiences. Spaces equipped with Regard provide patients, loved ones and practitioners with the ability to engage privately and comfortably and it allows for easier check-ins. Integrated education based media settings promote self-learning.

“It’s exciting to think about common spaces in ways that go beyond aesthetics,” says Alan Rheault, director of industrial design for Steelcase Health. Ultimately we’re looking to solve for a broad array of experiences that have the potential to happen within these areas.”

With Regard, the transitions people experience can be restorative, calming or productive. Gone are the rows of armchairs that discourage privacy and communication. In their place are areas that allow people to connect, relax and absorb information. For those wanting to connect electronically, outlets are situated beside both seats and surfaces, and essential in all of these scenarios is the idea of choice—that the user dictates the experience rather than the space.

While research and insights behind it resulted from a deep understanding of healthcare environments and conditions, the solutions Regard offers are equally applicable to education and corporate environments. Any organization eager to reclaim dormant real estate such as hallways, libraries and third spaces into connective hubs where groups can gather and collaborate can apply Regard to turn these transitional spaces into meaningful places.

“For us, it goes back to giving people the respect they deserve, whether it be in healthcare, education or business,” says Rheault. “There will always be those moments of transition and we recognized the need to find ways to make those moments more fulfilling.”

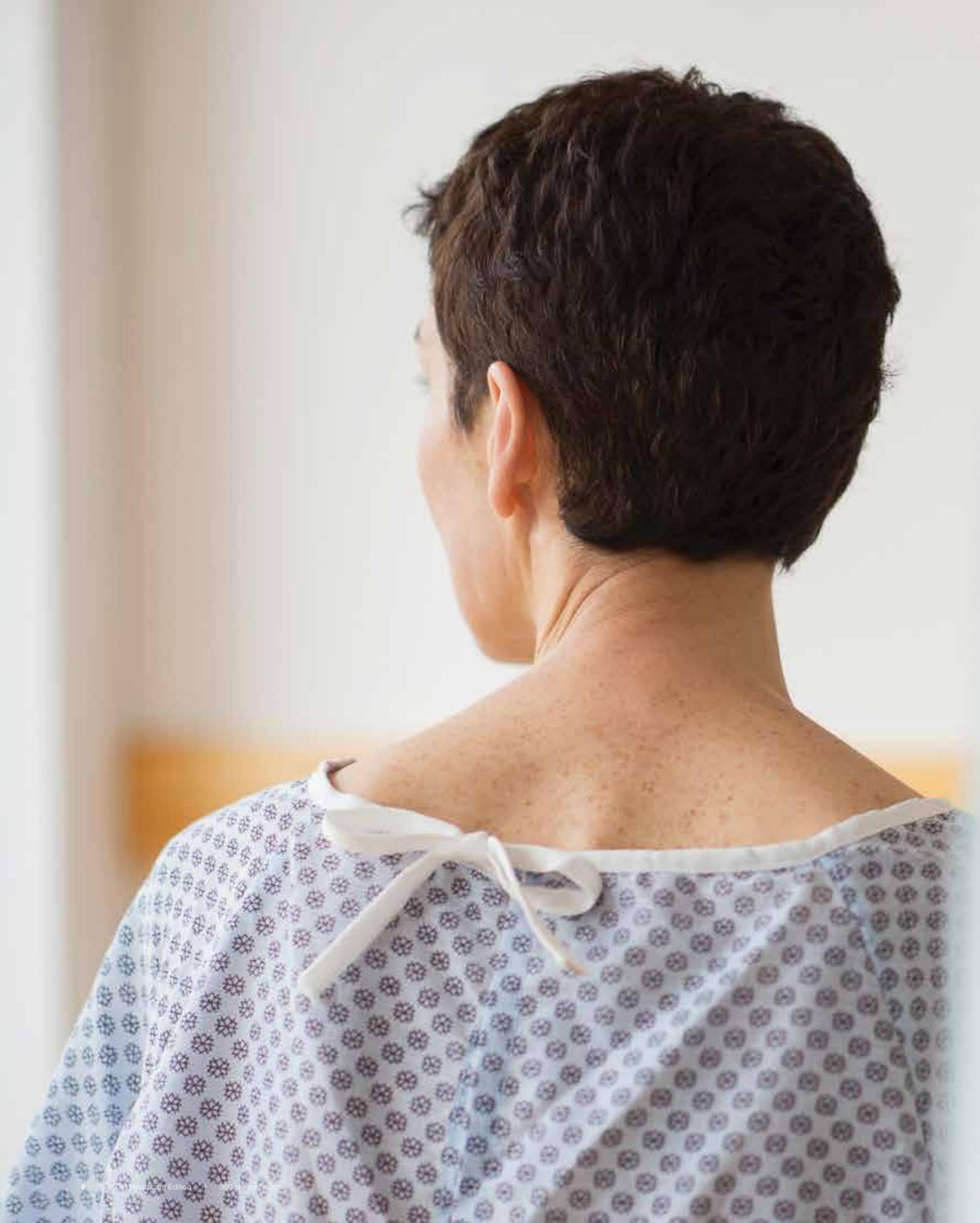
It’s time to make every moment count. ●

“The process of getting better is no longer confined to clinical spaces.”

Rob Heitmeier, General Manager, Steelcase Health

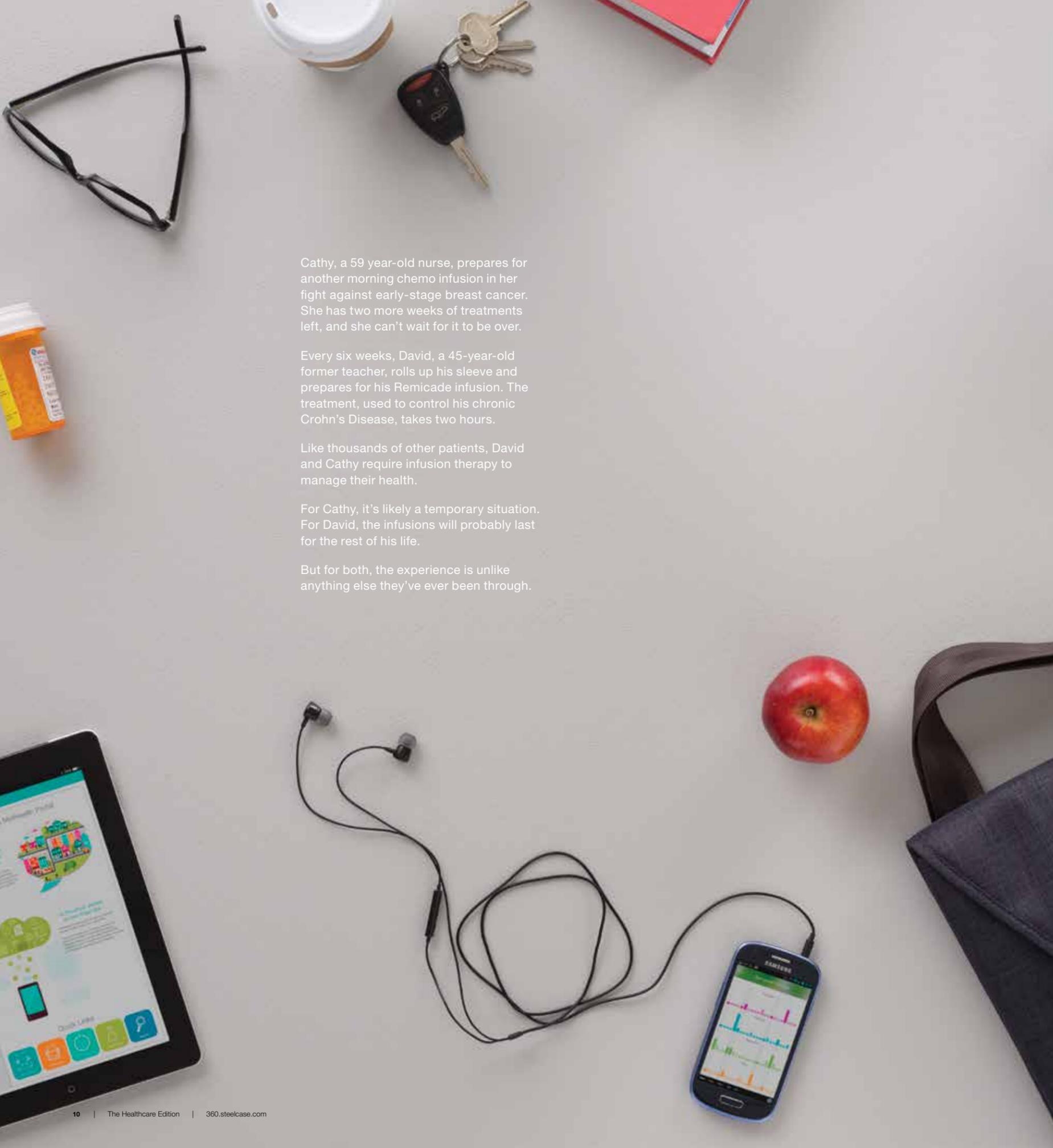


To create more meaningful use of time, healthcare spaces should support the need for privacy, comfort and emotional wellbeing.



E C O
S Y S
T E M

An Ecosystem of Spaces for Infusion Therapy



Cathy, a 59 year-old nurse, prepares for another morning chemo infusion in her fight against early-stage breast cancer. She has two more weeks of treatments left, and she can't wait for it to be over.

Every six weeks, David, a 45-year-old former teacher, rolls up his sleeve and prepares for his Remicade infusion. The treatment, used to control his chronic Crohn's Disease, takes two hours.

Like thousands of other patients, David and Cathy require infusion therapy to manage their health.

For Cathy, it's likely a temporary situation. For David, the infusions will probably last for the rest of his life.

But for both, the experience is unlike anything else they've ever been through.

Clinician and Patient Needs

Today, infusion therapy is a commonly used treatment for a multitude of diseases: cancer, congestive heart failure, Crohn's Disease, hemophilia, immune deficiencies, multiple sclerosis, rheumatoid arthritis and more. Globally, demand for infusion therapy is on the rise, with North America and Europe leading the way.

Treatment protocols differ from region to region, but one thing remains constant: the need for treatment spaces that balance patient support and safety. For most patients, treatment is a blurry combination of anxiety and hope, loss of control and diminished independence. It's a time of confusion and acceptance, and physical and emotional turmoil. For family members, it's marked by feelings of helplessness and stress, trying to cope with the competing and immediate needs of their loved one, other family members and employers. For clinicians, it's a workplace focused on patient surveillance, access to information and collaboration, and patient/family education and support.

But infusion treatment spaces today often reflect a different reality: They're stark and cold. They don't allow patients to control social interaction. They don't provide physicians and nurses with the tools and technology they need where and when they need it. Family is crowded out by medical equipment in poorly designed spaces, creating a sense of isolation when close proximity is needed most. Furnishings are uncomfortable, hard to clean and difficult to adjust.

"From a clinical perspective, safety is the paramount concern," says Michelle Ossmann, director of healthcare environments for Steelcase Health. "This is a time when patients are at risk for life-threatening reactions to their treatments and at risk for falls, so nurses must be able to observe their patients. And, as in any clinical setting but especially where many patients are immunosuppressed, infection control is a great concern." Patients need to be able to relax, knowing they're in safe hands while they receive treatment. And clinicians need to be able to react quickly, reaching the tools and supplies they need without delay or barriers, whether it's assistance to the bathroom or a new IV bag.

Ensuring patients' safety while tethered to an infusion pump is part of the clinicians' job as well. In most treatment spaces, patients sit in recliners as they receive their treatments. Steelcase Health researchers observed that recliners in infusion therapy spaces aren't designed for IV-connected patients, especially those who may be experiencing weakness in their extremities. Recline controls are usually only on one side of the chair and rely heavily on dexterity and strength. Posture choices are limited, and the recliners are usually overstuffed, making them hard to clean and unhygienic. They're hard to get in and out of, and often patients find them uncomfortable during long treatments.

For clinicians, these poorly designed recliners make it more difficult to tend to patients and add an increased risk of injury. "Giving patients control over their posture and physical comfort helps them maintain some independence and helps keep them safe," Ossmann added. These sound like simple things in an ordinary environment—but in infusion therapy spaces, these details have potentially serious safety implications.



But safety extends well beyond infection control and safe equipment use—it’s also critical that spaces be designed with clear sight lines between clinicians and patients. Medicine must be administered with great precision, and visual monitoring is imperative to check for side effects. That sense of safety is vital for patients as well. “Knowing I can see someone is really important,” said David. “I’m not new at this, and I know how I react now. But you’re taking serious medicine through a serious needle and you can’t really move, so it makes me feel a little more secure when I can see one of my nurses.”

Clinicians’ need to closely observe patients and patients’ need for privacy are often at odds, creating a tension point in space design. Cathy understands both sides of the story. “I know what it means to need to monitor my patients,” she said. “But for me, this has been an intensely personal experience and I don’t really want to feel like my privacy is being invaded. Cancer already invaded my body.”

Different Patients, Different People

By offering safe environments for infusion therapy treatment rooms, clinicians, patients and families can feel confident and comfortable all is well. And that sense of emotional and physical comfort is a key piece of the treatment process. It’s important to realize that infusion therapy treatment is a highly individualized protocol and path. Every patient experiences different physical states and emotional needs at different points along the way, based on their diagnosis, treatment plan and possible side effects. “Every time you go to treatment, it’s different,” said Mary Juhlin, a Steelcase Health product manager. “Your physical condition is different, your perspective is different and your care partner has different things going on, too. Personalizing that changing experience is what we’re trying to do.”

For instance, chemotherapy treatments can last minutes, or they can last up to eight hours. During that time, patients who feel well enough can be encouraged to move around, to walk, to socialize and to exercise a sense of control over their posture, their temperature and even the lighting. There’s no reason patients need to be confined to their treatment recliners, stuck in the same position for hours with no positive distractions or stimulation. But many infusion therapy suites make the simple task of getting up difficult for patients who must have their recliner adjusted for them and IV pump disconnected. In some cases, recliners are static, unable to recline to comfortable positions because equipment crowds the treatment area. “What’s needed is freedom of movement in those spaces,” said Juhlin. “It means creating a whole environment where patients can easily and safely receive treatment, move, eat, meet with people, socialize and relax. This helps patients feel like a whole person, not just a patient. It’s not just about the recliner any more—it’s about the whole environment and experience.”



In various forms, positive distractions can take patients’ minds off their circumstances and help them feel a sense of normalcy. “You need to take your mind off the treatment,” David said. “There’s this weird element of wanting to watch the IV slowly dripping into your arm. They have TVs I can watch instead. Sometimes I read, sometimes I sleep and sometimes I work on my laptop to help pass the time.” He prefers as much separation from other patients as possible during his treatments. “You’re in a semi-private environment discussing very private things. I don’t want the distraction of another person.”

Making Room for Family

Family members, friends and other care partners often accompany patients for infusions and appointments. The presence of family members reassures patients that someone is immediately available to help them if needed and provides emotional support. However, many waiting room and treatment area designs imply that family members are an imposition, lacking simple conveniences like comfortable seating, storage for personal items or outlets to charge electronic devices. “Family members want to be with their loved ones, but they’re also juggling demands from their outside lives as well,” says Steelcase Senior Design Researcher Caroline Kelly. “We see that patients don’t want to be viewed as a burden. They want their family members to keep pace with their jobs and their lives, and not being

“Every time you go to treatment your physical condition is different, your perspective is different and your care partner has different things going on, too. Personalizing that changing experience is what we’re trying to do.”

able to stay on top of those things makes patients feel guilty and care partners feel more stressed.” Staying on top of work demands access to power, data and a work surface.

Allowing family members and patients to be physically close promotes privacy, intimate communication and monitoring for changes in the patient’s condition. But often, family members just need a place to rest. Early morning appointments, long hours and the need for travel can wear on caregivers, who often put their physical needs second to their loved ones. “Getting enough rest is critical for the care partner,” said Kelly, “but most treatment spaces weren’t designed to accommodate that.”





Recliners help patients relax in comfort with the option to change postures during treatment. It's easy for clinicians to get close and tend to patients' needs efficiently.

Modular casegoods define personal space, and they give clinicians easy access to patients, technology and supplies.

Seating with integrated power access allows for partners in care to stay connected via technology while supporting the patient with their presence.

A New Infusion Experience

As we learn more about the dynamic needs of infusion therapy patients, it's evident that treatment spaces and waiting areas must do a better job of accommodating patients, clinicians and family members. By designing treatment spaces that promote safety, provide emotional and physical

comfort for patients and support families, we believe treatment spaces can play an integral role in the healing process. With a suite of options that offer choice, control and access to technology, new infusion therapy treatment spaces can help transform an incredibly difficult time into one of support and hope.

Semi-open Treatment Areas

This setting enables patients to have family members present as well as socialize with other patients. Patients can switch from upright to reclined positions. Personal space is defined. And clinicians have immediate access to patients, technology and supplies.



Side-by-side recliners help patients relax in comfort. There's still plenty of room for clinicians to get close and tend to patients' needs efficiently. Because people often learn better together, this space provides opportunities to watch an informational video or participate in a small group discussion with a care provider.

A comfortable booth provides intimacy for families who want to play a game, enjoy a snack or simply be together in their own space.

A lounge chair can be a relief for people who are tired and stressed, wrapping comfort around them.

Communal Space

A café-like social hub, this space supports many activities—going online, getting work done, watching TV, reading, playing games, snacking or conversing. Families and patients may choose to be in or near this open space for its energizing quality, and it's also an ideal environment for group or individual learning.



A comfortable pull-up chair with a generous seat is multipurpose, making it easy to reconfigure the room to whatever is occurring at the moment.

Next to the patient's recliner, a mobile overbed table works as an end table, a snack tray, a game center or a worksurface. It's also a place for clinicians to rest a laptop or tablet to display health information that can be brought close to everyone in the room.

Having a place for personal items makes it easy to settle into a space that feels more like "yours" for as long as you're there. This storage unit does double duty as a bench for short-term sitting, adding to the flexibility of the space.

Designing for Infusion Therapy Spaces

People

- Design an ecosystem of private, semiprivate and communal spaces that recognizes people's individuality and desire for control of their environment
- Plan for the presence of family members throughout the space. Provide seating that supports various postures: upright sitting, perching, lounging, reclining, lying down, etc.
- Support sharing information in a variety of ways
- Create spaces that allow people to connect face-to-face without interference
- As much as possible, design the spaces to feel informal and hospitable

Place

- Design treatment settings that offer various levels of privacy
- Build in flexibility so the space can adapt to future needs
- Include open storage so people can help themselves to blankets, tissues, water, etc.
- Provide a communal café space with television, game tables, Internet access, reading materials, etc.
- Bring natural light in with large windows and skylights
- Realize the importance of adjacencies and sightlines that support spatial awareness, way-finding and opportunities for communication

Technology

- Leverage technology to enhance communications, but don't let it overwhelm the environment
- Anticipate new and emerging technologies with an adaptive infrastructure
- Support use of mobile technologies by clinicians, family members and patients
- Include an electronic room-reservation system to manage use of private and semi-private spaces
- Make it easy to adjust lighting levels in private and semiprivate spaces

Private Family Treatment Rooms

When patients and family members need time together apart from the eyes of others, these rooms offer plenty of space for interaction, lounging, playing games or sharing a snack. This space allows patients to feel a higher sense of control over their environment, and ultimately their treatment.



A POSITIVE PROGNOSIS

PATIENT ROOMS



ABC

123



Meet Jenny. When she gave birth to her second child a few months ago, she was exhausted and thrilled. Thanks to a new hospital policy, baby Carson stayed in the same room, never leaving for the nursery. The room was packed with well-intentioned family members as well as a wall-mounted computer for electronic medical records. All Jenny wanted was some quiet rest—and for the computer to stop waking up the baby.

Meet Meredith. When her mother was dying from cancer, Meredith practically lived at the hospital, ensuring her mom was never alone. That meant she had to make tough trade-offs. Not enough time for her husband. Or her dog. Or her job. What she didn't expect was all the trade offs she was forced to make in her mom's hospital room just to maintain some semblance of normalcy.

Meet Ansley. A nurse who deals with a lot of orthopedic patients, she's constantly checking on patients and encouraging them to move around. She prefers to talk with her patients face to face, but navigating around a walker and a wheelchair makes it tough for Ansley to even get to her patients' beds, much less find a chair she can use.



The patient room, that often overcrowded yet under-performing space, is experiencing a long overdue reinvention. The next generation of patient rooms, being built and renovated now, will incorporate technology for the patient and family as communication and learning tools.

Here's what's fueling the move:

- 1 A healthcare construction boom in the last several years, combined with renovations of existing facilities, has brought thousands of new rooms onboard.
- 2 Medical errors, infection control and clinician injuries necessitate safer, more efficient patient rooms.
- 3 New healthcare laws directly link patient outcomes and satisfaction scores with reimbursement levels, so every square foot must deliver profitability.
- 4 With outpatient procedures gaining popularity and complexity, patients who are admitted to the hospital exhibit more acute symptoms, so the space must be able to respond to critical care needs.
- 5 Years of research confirm that the patient room plays an important, yet largely overlooked, role in positive outcomes. This body of research is literally transforming patient rooms with built-in ability to flex for the future.

Building on the Body of Research

From universities settings to hospital boardrooms, innovation consultancies to equipment and furniture manufacturers, the patient room of the future has been the focus of intense research. Architects and designers, clinicians and patients have intuitively understood the impact of space on healing, and now there's a body of supportive research. Today, multiple studies indicate that well-designed rooms often lead to increased patient satisfaction rates, fewer accidents, lower infection rates, shorter stays and even a decrease in pain medication. Once a theory, the field has reached a tipping point and crossed over into mainstream design practices.

"More than ever, patient rooms are more than just a place for a bed and medical equipment," says Michelle Ossmann, director of Healthcare Environments for Steelcase Health. "The patient room is where you have to get everything right for the patient, family members and clinicians. When you incorporate literature-based design principles and truly create a space that's people-centric, everyone benefits."

Safety First

Patient safety is every healthcare providers' first priority, and with good reason: Medical errors and hospital-acquired infections are among the leading causes of death in the U.S., where one in 20 patients develops an infection while in the hospital, according to the Centers for Disease Control and Prevention, costing more than \$10 billion a year. Europe is not immune either: one in 19 patients has at least one hospital-acquired infection, amounting to nearly 3.2 million patients a year, according to the European Centre for Diseases Prevention and Control.

Transmission is directly linked to clinicians' failure to consistently wash their hands and contact with exposed surfaces. Design can support infection control processes by:

- Creating a clinician zone at the room entrance featuring a sink and alcohol-based hand cleaner to reinforce the importance of diligent handwashing.
- Specifying materials and surfaces that are easily cleaned and maintained, from high-performance upholstery to solid surface casework.

But it's more than just washing hands and making sure surfaces are clean and cleanable. Designing to prevent patient falls is a high priority as well, ensuring unimpeded access to the bathroom and recliners that afford easy, independent egress. Falls are the most common adverse event in hospitals around the world, with approximately 3–20 percent of patients falling at least once during their stay, according to one report. A 2013 Agency for Healthcare Research and Quality report found that every year in the U.S. somewhere between 700,000 and 1 million people fall in the hospital, with more than a third of those considered preventable. Nearly half of patients who fall experience injuries ranging from bruises to bone fractures. Human-centered design can help encourage patient mobility and clear potential obstacles for safe ambulation.



It's also about protecting clinicians' health. A World Health Organization report states that 37 percent of lower back pain is attributed to occupation, and healthcare workers are more prone to experience it. In fact, recent U.S. Department of Labor studies show that nursing assistants suffer roughly three times more back injuries than any other occupation. These injuries can be traced to the repetitive heavy manual lifting associated with moving patients and working in awkward postures. Room design that integrates mechanical lifts or helps clinicians access patients without assuming uncomfortable and potentially dangerous postures has been shown to help reduce the frequency of clinician back injuries.



The Multi-Functional Room

For patients, it's a healing space, bedroom and dining room. For clinicians, it's a workspace and procedural environment. For family members, it's a living room, and sometimes even a bedroom or office. The competing demands on patient rooms stretch their usability and create inherent tensions among all occupants. Without any space to spare—the average patient room is about 300 square feet (28 square meters)—multi-functionality is essential.

Just ask Jenny, who recently gave birth to her second child, a son, a few months ago. After a complicated delivery, Jenny's experience in her patient room failed to deliver on almost all measures. The hospital's new policy of in-room baby care meant little Carson never left the room creating extra-cramped quarters. And the hospital's new electronic medical records computer, attached to the wall, didn't stay tucked in and out of the way. The keyboard hit the bathroom door and the monitor's lights

came on and woke up the baby every time it hit. No wonder she was seriously sleep deprived. "I couldn't charge my cell phone, I couldn't reach my water on the table without asking someone, and I had no idea where my things were. I felt like I wasn't in control of anything," she reports. "The room was not conducive to healing."

By designing patient rooms that encourage healing, provide modern conveniences and give patients a quiet respite, patient perspectives on care improve and experiences like Jenny's become less common.

Encouraging Educational Interactions

There are few things as anxiety-inducing as a serious medical issue, and teaching and learning are essential parts of alleviating that worry. Valuable exchanges happen between patients, clinicians and family members but not always at the same time, so it's important to consider design elements that foster communication.

Clinicians, patients and family members are beginning to expect more personal, private and frequent communication, and the physical environment can impact the quality of those interactions. For example, a clinician who often counsels patients and family members on radiology procedures recently described how the hospital where he works hasn't fully completed patient room renovations. "About 85 percent of the time, I have to stand over the patient to talk with them," he said. "Where the chair is located in the older rooms isn't a place where I can talk with them eye to eye."



A woman who lost her mother to cancer after several weeks in the hospital echoed a similar experience, but from a family member's perspective. "There wasn't a good space for me to talk with the doctors," she said. "They wanted to give me an update, but I didn't want to disturb my mom while she was resting. So we had to go in the hallway. There was no privacy. I wish the room was more calming so I could think of the right questions to ask."

In newer settings, creating a sense of shared presence helps establish informational transparency around the patient's medical status and treatment plans. Design can create multiple communication channels and opportunities to make important information accessible to everyone involved in patient care.

Whiteboards convey vitals, staff changes and contact numbers for clinicians. They also provide a place for clinicians to sketch and visualize information for patients and families.

Comfortable, easily moveable chairs make it easier for clinicians and family to sit next to patients, allowing a more natural way to connect.

Some hospitals are starting to experiment with tablets and apps to digitally communicate with patients and share information about their conditions, medications and lab results. This data can be shared on in-room screens to spark conversation and questions.

Recognizing Family Needs

Kate, a pancreatic cancer survivor who's been an patient at three hospitals and undergone eight surgeries in the last 15 months, put it plainly: "You want your family there with you all the time," she said. "You're not in a state of mind where you can ask questions and remember. You need that backup." But she also witnessed how they had to create workarounds and juggle responsibilities. "My poor brother and sister," she said. "They were trying to work and take care of me and talk with the doctors and I know it wasn't easy."

Friends and family expect to feel engaged and welcomed in their loved one's hospital room. But all too often, tightly packed rooms aren't equipped for larger family groups, overnight stays or even basic levels of self-sufficiency.

Progressive hospitals understand that healing isn't just for patients; it's also for weary family members.



By designing patient rooms that encourage healing, provide modern conveniences and give patients a quiet respite, patient perspectives on care improve.

Choice, Control and Comfort

Hospitalization challenges patients and their families physically, cognitively and emotionally, as feelings of vulnerability intensify and create a need for personal control and comfort, which are key components in the healing process. Innovative design creates environments that are less institutional and more customizable to help people process the strains of the experience.

Today, many up-to-date patient rooms feature individual lighting and temperature controls in addition to the traditional bed and television controls. One hospital is even experimenting with colored LED lights so patients can add more visual interest to their rooms. Some hospitals are expanding this idea beyond room design, allowing patients to choose menu items and meal serving times.

“The best thing about the hospital room where my mom was treated was the lighting,” one family member said. “There was lots of natural light, but, more important, we could control the room lighting. We could even control different zones in the room, so if my mom was sleeping and I wanted to read, we had options for that.” ●

NEXT-GENERATION PATIENT ROOMS

For more than 70 years, patient hospital room design and experience has remained fairly static as new medical advances and technology have eclipsed the space’s efficiency, comfort and safety. Thankfully, a human-centered perspective is now influencing patient room design—one that focuses on the needs of patients, clinicians and family members.

The applications that follow are thoughtstarters that address these needs in inboard patient rooms and outboard patient rooms.

Inboard Patient Room

With everything close by, this room design makes family feel comfortable and more involved in their loved one's care. An efficient space where clinicians can move around freely and engage effectively, this layout amplifies the quality of interactions.



1 The Sieste® sleeper sofa and table allows family members to carry on with their daily activities like work while remaining in the room so they can provide comfort and advocate for the patient. The table allows note-taking, fostering collaboration with the clinician and patient, while the sleeper sofa easily converts to a bed, allowing visitors to sit, lounge or sleep in comfort.



2 A combination of open and closed compact storage allows patients to keep items secure, and also display flowers, cards and photos to personalize the space.

3 With a large, high-definition monitor, clinicians can quickly engage with patients and family members by displaying health information or videoconferencing with a specialist or family member.

4 Whiteboards convey staff changes and contact numbers for clinicians. They also provide a place for clinicians to sketch and visualize information for patients and families.

5 Pocket™, a mobile clinician workstation, enables clinicians to engage in face to face communication while documenting in the patient's chart, all while holding technology in a tight footprint.



THOUGHTSTARTERS FOR:
Outboard Patient Room

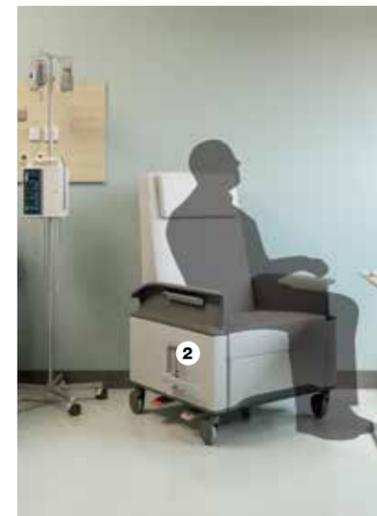
Clinicians are afforded ample circulation space around the bed in this patient room, allowing them to position themselves appropriately for procedural activities as well as meaningful interactions with the patient and family. A low traffic corner of this patient room provides a cozy zone where family can remain close to the patient while carrying on with life's activities.



1 The overbed table does double duty and acts as a consultative space.



2 Empath recliners, featuring break-through design features including safe, easy and quick cleaning upholstery and pass-through design that avoids trapping liquids and debris, provides versatile seating, encouraging family members to stay in comfort.



TAKING CARE OF THE CARETAKERS: CLINICIAN PRIVACY

In the era of big data and healthcare, there's one buzzword at the center of every conversation: privacy. From HIPAA to telemedicine to electronic health records, concerns about privacy are at fever pitch. But too often, these conversations are centered exclusively around patients and health information technology, ignoring the importance of providing clinicians with the privacy and space they need to safeguard information and maintain their own wellbeing.

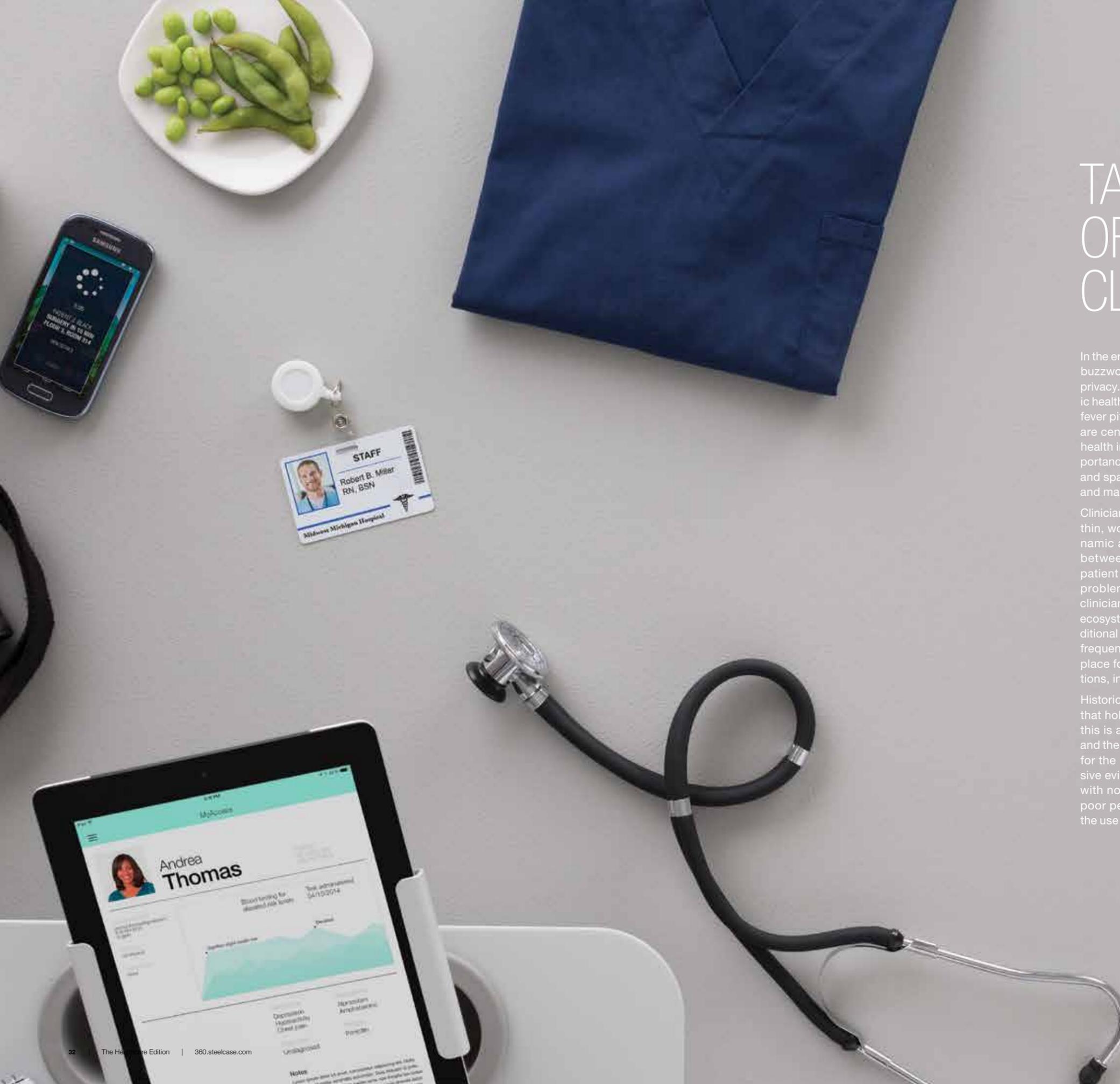
Clinicians of all levels find themselves stretched thin, working in spaces that don't suit the dynamic and changing roles they must switch between during their shifts. Room to share patient information. Room to focus on tough problems. Room to relax and recover. Most clinician spaces today don't offer this diverse ecosystem of spaces—instead relying on the traditional nurses' station. But nurses' stations are frequently noisy, busy spaces that don't offer a place for individual focus or private conversations, increasing the risk for costly errors.

Historically, hospitals have been environments that hold little regard for clinician privacy. Yet this is a problem not only for those clinicians and the patients they serve; it is also a problem for the hospital's bottom line. There is extensive evidence that noisy, hectic environments with no place for focus and escape result in poor performance and absenteeism. And as the use of telemedicine and other remote video

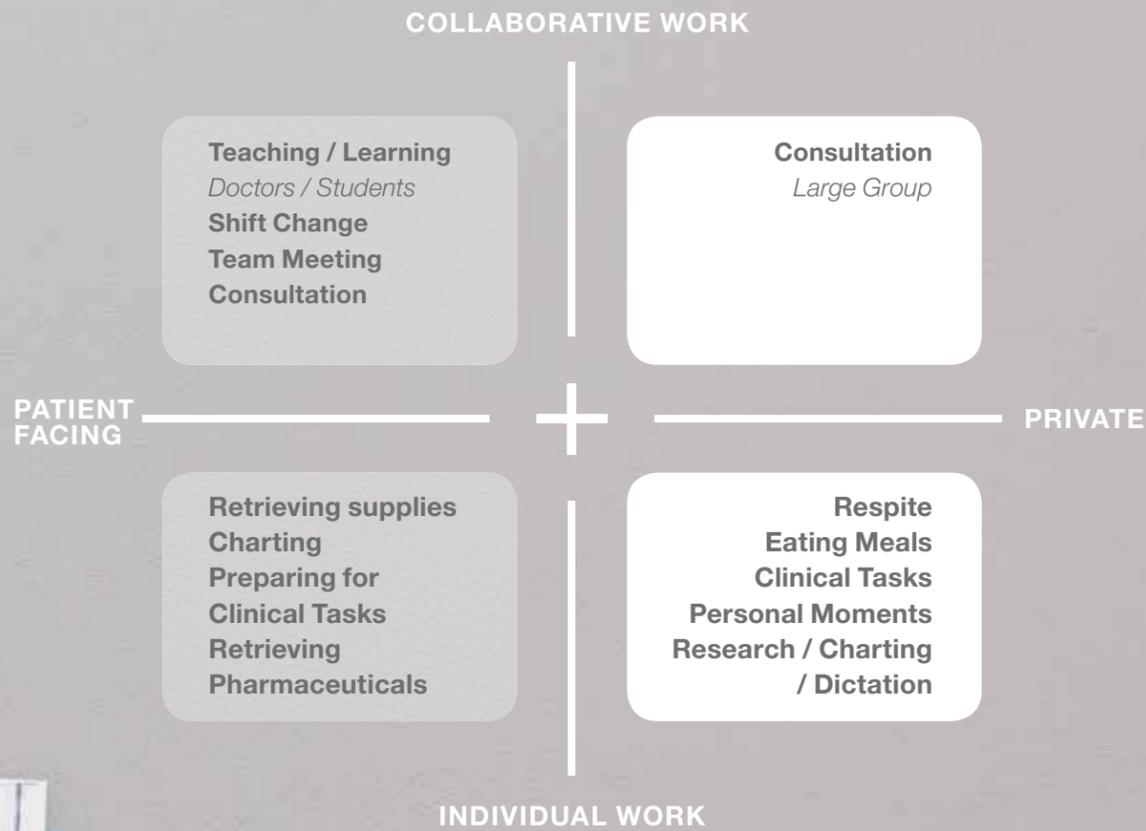
collaboration tools increases, clinicians will require more private environments to share patient information. It's time for us to better support those who deliver care.

Hospitals must take action to protect the privacy needs of not only their patients—but also their staff. As the primary care shortage continues to result in an influx of nurses, physician assistants, and other team members delivering care on the front lines, creating spaces for hospital employees to step aside and find privacy will require a more thoughtful and concerted approach.

By studying clinicians' needs and behaviors and understanding their everyday workflows, Steelcase Health offers an innovative new approach for improved clinician efficiency, accuracy, satisfaction and overall wellbeing. It's designed to empower clinicians, connect them to technology and to each other and, ultimately, to create more connected patient care. And privacy is a very important part of the story.



As demands on clinicians' work become more demanding the greater the need for a range of spaces that meet their varied needs. Space for collaboration. Space for focus. Space for respite. For organizations that are actively driving improvement through their operations, clinician workplaces can be a strategic asset for a more effective organization, which in turn has a positive impact on patient care and satisfaction.



Prescribing Privacy for Clinicians

The inherent tension for clinicians lies in alternating demands to communicate with patients, families and colleagues and their own need to concentrate on individual, detailed, heads-down work. "Clinicians have shared with us that it can be very stressful to try to chart at the patient's bedside while the family is present," said Caroline Kelly, a Steelcase researcher. "For some tasks, they want to be able to go somewhere private where they can be shielded from other demands."

Whether it's updating electronic medical records, conducting patient research, trading information during a shift change or simply taking an important personal phone call, private getaways humanize the healthcare work environment and improve clinicians' sense of wellbeing and ability to focus as needed.

But finding places to have periods of intense concentration or even small moments of respite in most healthcare environments can be difficult. Because there are no spaces designed for privacy, often clinicians ignore their own wellbeing in favor of their patients, feeling unable to take full breaks and allowing themselves to be interrupted during rare quiet moments. In a study on staff respite conducted with Spectrum Health, one of the U.S.'s highest-rated large healthcare systems located in Grand Rapids, Mich., Steelcase researchers discovered that the staff were taking what they termed "micro-breaks." Instead of 15 minutes in the break room, they'd take less than a minute, pausing just long enough for a quick sip of water and a deep breath. "Not every break is deeply immersive," says Kelly. "Some are just a few moments, so we need to make sure the spaces are convenient and support the activity the staff wants to do."

Designing for Wellbeing

Steelcase Health has developed applications for clinical and administrative workspaces with three core design principles in mind: to humanize the work experience, and to empower and connect clinicians. Privacy needs are inherent throughout, from individual solitude to quiet, small-group discussions to retreat spaces for staff—a range of settings to meet individual, group and organizational needs.

"When the organization provides spaces that support the wellbeing of their employees, it empowers the staff to take care of themselves," Kelly says. "This gives nurses the chance to say that taking care of themselves is important. Since they're feeling recharged and rejuvenated, it's easier for them to encourage their co-workers to take a break and offer to cover their patients." When the organization provides a human-centered workspace that recognizes people's privacy needs, cultural changes naturally follow and individuals find themselves adopting new behaviors. By design, it all adds up to enhanced provider wellbeing, satisfaction, accuracy and patient care.



The clinician hub creates a more dynamic, functional space that allows for a greater range of work modes. This hub is an ecosystem of different spaces for different activities: collaboration, focused tasks, teaching and learning, and quick social exchanges.

Clinicians' Hub: Central Nursing

A reimagined nurses' station creates a more dynamic, functional space that allows for a greater range of work modes. Unlike a traditional nurses' station, this hub is an ecosystem of different spaces for different activities: collaboration, focused tasks, teaching and learning, and quick social exchanges.

The hub also provides easy sightlines to patient rooms so clinicians can maintain awareness of what's going on around them. Multiple points of entry and exit make movement fluid. Technology is thoughtfully integrated throughout all workspaces in recognition of its increasing importance in healthcare. As more and more clinicians rely on mobile devices such as tablets, the hub features a multi-port charging station that provides secure support, so expensive equipment gets dropped less frequently, recharged often and used to share more patient information. Adjustable monitors and foot railings encourage personalized work styles and postures, providing physical comfort and relief for aching feet.



Charge Nurse Enclave

For clinicians, privacy can't mean physical distance from patients. Charge nurses and nurse managers often express a need to be able to move quickly between private and patient-facing spaces. Maintaining situational awareness and being able to seamlessly transition can make all the difference when it comes to responsive patient care.

A nurse enclave accommodates clinicians' need to do focused work while maintaining a close watch on what's happening on the floor. With visual and acoustical semi-privacy, it's an ideal space for charting and other heads-down work, as well as phone calls or videoconferencing. Staffers can see through glass walls, encouraging impromptu conversations and questions, but an enclosed configuration assures periods of privacy as well.

Technology-supported collaboration

In addition to individual spaces, clinicians need quiet collaboration spaces where they can share digital information and consult with others, including via videoconferencing from different locations. Given recent data that telemedicine will grow at a rate of almost 20 percent every year, creating space for it to be successful is paramount. The new footprint includes space for an enclosed telepresence room, complete with high-definition videoconferencing, creating an optimized setting for physician consultation and collaboration. Teams and specialists in multiple locations can now share vital information in casual, quick, informative sessions. Seated-height chairs allow for longer meetings to generate and evaluate ideas. Enhanced communication leads to more connected care, and better outcomes.



A clinician retreat near the clinicians' hub provides a combination of social and private spaces that can include a small kitchen, eating area, media bar, personal lockers and a separate enclosed respite area for one person.



Clinician Retreat

Not surprisingly, clinicians tend to place their own care at the bottom of the priority list. "We need to support them by understanding the context of their work and giving them choices that fit instead of telling them to walk five minutes down three different corridors to the break room," Kelly says. "Most will tell you they can't leave their unit that long." A better alternative is a strategically and conveniently placed retreat near the clinicians' hub. A combination of social and private spaces fills the respite area, including a small kitchen, eating area, media bar, personal lockers and a separate enclosed respite area for one person. These touchdown spaces encourage balance and rest, so patients receive better care, staffers are less prone to burnout and breaks become all that they're meant to be.

Enclosed Respite

Healthcare practitioners see some of the most joyous and devastating moments in people's lives, creating an emotional roller coaster. Sometimes, it's necessary to move into a quiet space after a stressful experience, or just to take an urgent personal phone call away from the hubbub of the open work environment. An individual enclosed enclave adjacent to the clinicians' hub allows workers to take a few moments to re-center themselves or handle personal matters, reducing their stress load and the risk for medical errors.



Time For Change

The old ways of working in a healthcare setting are giving way to smarter, more human-centric ways that emphasize clinician wellbeing. The signature spaces of the healthcare landscape are changing as well, providing more efficient, versatile and private spaces than the old nurses' stations. As healthcare continues its evolution towards consumer-driven models of care and value-based reimbursements, forward-looking hospital leaders will transform their spaces to accomplish these new market requirements. These leaders will remember that privacy is about more than just patients' health records; it's about the basic human need for choice and control. The benefits of providing privacy for healthcare workers are already clear, from fewer medical errors to increased staff retention and better patient care. ●



The signature spaces of the healthcare landscape are changing, providing more efficient, versatile and human-centric spaces that focus on clinician wellbeing.

Go Deeper

If you want to learn more about the interesting, insightful work being done by thought leaders referenced in our article, here is a menu of resources to choose from:

Article: Global Telemedicine
steelcase.com/telemedicine

Guide: Time For Change: New Solutions for Healthcare Places
SteelcaseHealth.com/applications



Steelcase®
HEALTH

We work with leading healthcare organizations to create places that deliver greater connection, empathy and wellbeing for everyone involved in the experience of health.

HEALTH. CARE. TIME FOR CHANGE.

Improving the experience of health can feel overwhelming. Perhaps the best change we can make is to look for the changes that are possible to make.

Changes that are **meaningful**. Changes that are **personal**. Changes that can be pivotal for the **people** involved.

At Steelcase Health we believe that change can come from truly enriching the moments that matter most. We study the places that support health and then deliver insights, applications and solutions designed to create moments that can lead to change.

Moments that enhance the **wellbeing, empathy** and **connection** of clinicians, patients and families.

We believe Steelcase Health can make a difference.

We believe in the power of place.

For more insights, applications and solutions, visit us online.

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EXAM ROOMS THAT EMPOWER PEOPLE

The quality of people's experiences and the human dimensions of healthcare are more important than ever before. As active participants versus passive patients, today's consumers of care are transforming past norms, driving rapid change across the industry as they seek a person-to-person approach and more control over decisions about their health and wellbeing.

Many are actively “shopping” for the best care by checking hospital and doctor ratings, asking more questions during appointments, expecting more information, and researching cost and treatment options. Others are being prompted by their doctors to take on more accountability for their health through meaningful lifestyle changes that address often-preventable diseases such as obesity, diabetes and hypertension.

As new tools, programs and approaches rapidly evolve, healthcare organizations are grappling with how to incorporate them successfully. At the same time, they shouldn’t overlook an asset that’s highly leverageable and pivotal to success: their spaces.

“When thoughtfully designed and equipped around the needs of patients as well as staff, spaces can help health care organizations manage costs and drive revenue, while improving patient outcomes and increasing their satisfaction,” says Bob Crain, Steelcase vice president of strategic markets, which includes Steelcase Health.

OVERDUE FOR CHANGE

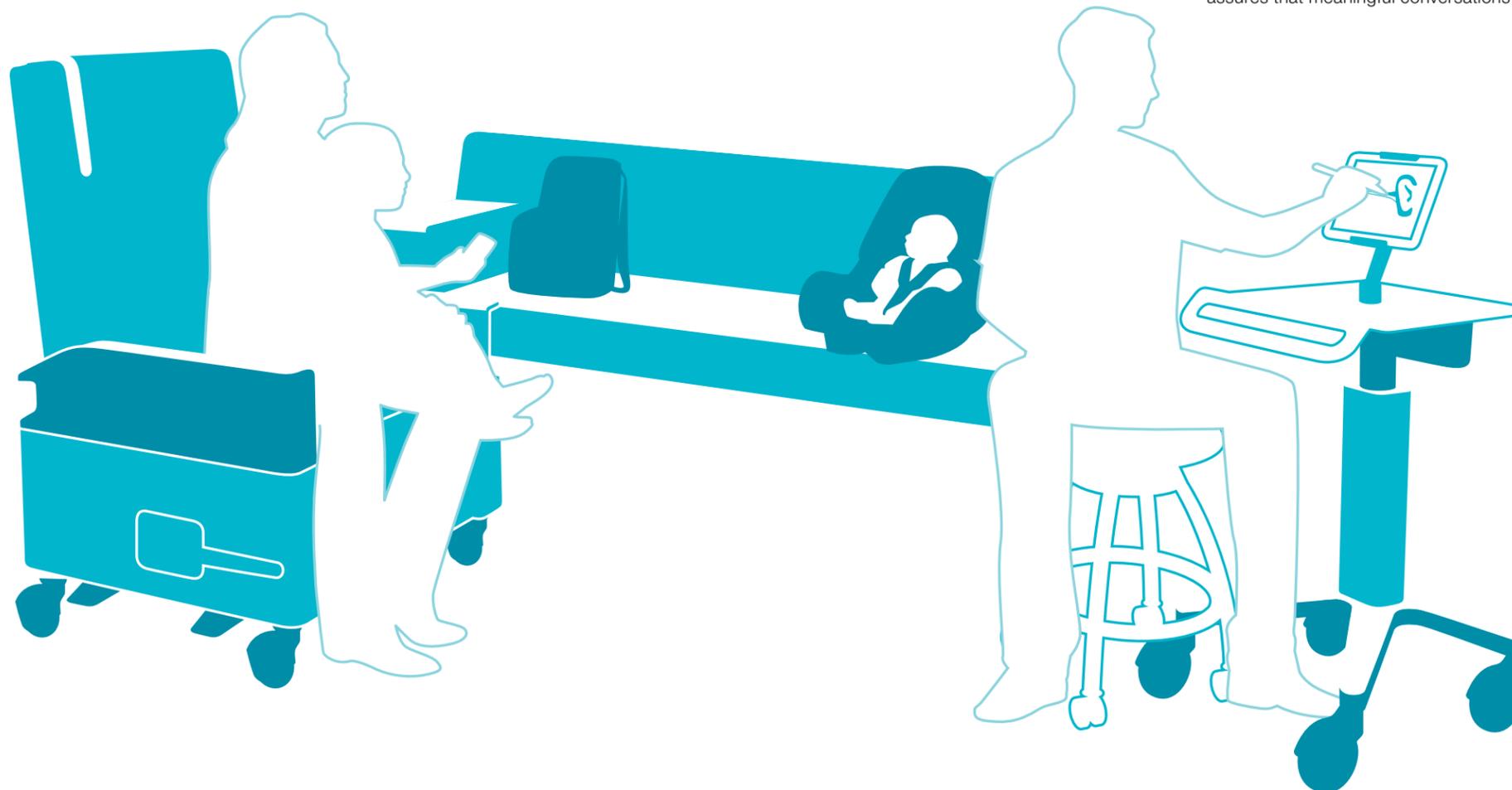
As patient engagement becomes the new clinical paradigm, exam rooms are critically overdue for a makeover. Yesterday’s exam rooms may have sufficed when receiving care was mostly a passive experience, but reimagining them to support today’s user needs can reap tremendous benefits.

“For most people, the exam room is at the center of the healthcare experience,” says Crain. “It’s where the clinical and personal aspects of healthcare closely intersect.”

Unfortunately, however, traditional exam rooms are woefully inadequate to support the stepped-up teaching and learning that are essential for people’s engagement in their health. This is among the significant findings of Steelcase Health researchers who have conducted more than 15,000 hours of observations and inquiry through 18 studies to understand the how healthcare spaces are actually used and to identify ways they can be improved.

The Steelcase Health researchers observed that most exam rooms are intimidating environments that don’t encourage patients to interact with information. Exam tables put patients at a different height than the healthcare provider, making sharing information awkward and impersonal. If a computer is in the room, sightlines to the information on it are typically limited to healthcare providers.

What’s more, fixed, bulky furniture makes most exam rooms crowded. They aren’t designed to accommodate family or other support persons who are often important partners in attaining optimal health and wellbeing. There’s no private place to undress, inadequate storage for belongings, and little to do but wait or read a random magazine before the healthcare provider enters the room.



ANTICIPATING PEOPLE’S NEEDS

“We are finding that exam rooms today are about much more than exams. They need to be equipped for teaching and learning about health status, conditions, treatments and healthy lifestyles,” says Hyun Yoo, a Steelcase Health senior designer. “This means leveraging multiple ways of connecting people to information. It also means designing exam rooms so they accommodate more people than just the healthcare provider and patient. Having family or loved ones in the exam room, physically or virtually, helps to ensure that important information is heard, understood and retained. This increases the chances for engagement and good outcomes.”

Creating a palette of place—within the exam room or in an adjoining room—to support the different activities that occur during exam and consultation assures that meaningful conversations can take

place and new and emerging technologies can be used to heighten understanding.

For healthcare providers, it’s important that exam rooms are efficient, well-equipped spaces that streamline work processes. Easy mobility can be a time-saver. And with smart devices, apps and Web-based information among the new tools healthcare providers use for exams, it’s important that technology devices stay in reach and in sight for everyone in the exam room.

“When the elements of place, technology and people are holistically considered in exam rooms, the result can be more engaging, connected care,” says Yoo.

As part of a strategic framework, exam rooms are essential tools for supporting the transition to consumer engagement in healthcare. When thoughtfully designed around user needs and furnished with innovative products, exam rooms can be efficient and flexible work environments for healthcare providers. They can also be high-functioning, supportive spaces where patients can focus on the important topic of their health and wellbeing.

CREATED FOR BETTER EXAM EXPERIENCES

Research-based insights into people’s wants and needs in exam rooms inspired development of the Steelcase Health Empath™ recliner, an alternative to exam tables that puts everyone on the same level and makes it easier to transition from one procedure to the next.

Whether it’s an exam room in a doctor’s office, an urgent care center, a surgery center or the emergency room, Empath is an empowering alternative to an exam table.

Empath is also well suited to quick care spaces for primary care patients who have simple, straightforward care needs that don’t require a fully outfitted exam room setting.

Whatever the setting, Empath makes it easy for people to connect to each other and to information, helping to humanize the healthcare experience. ●

The following exam room settings have been informed by insights from our research to create exam rooms that empower people and allow for better patient engagement and improving patient outcomes.



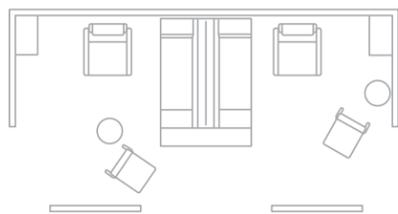
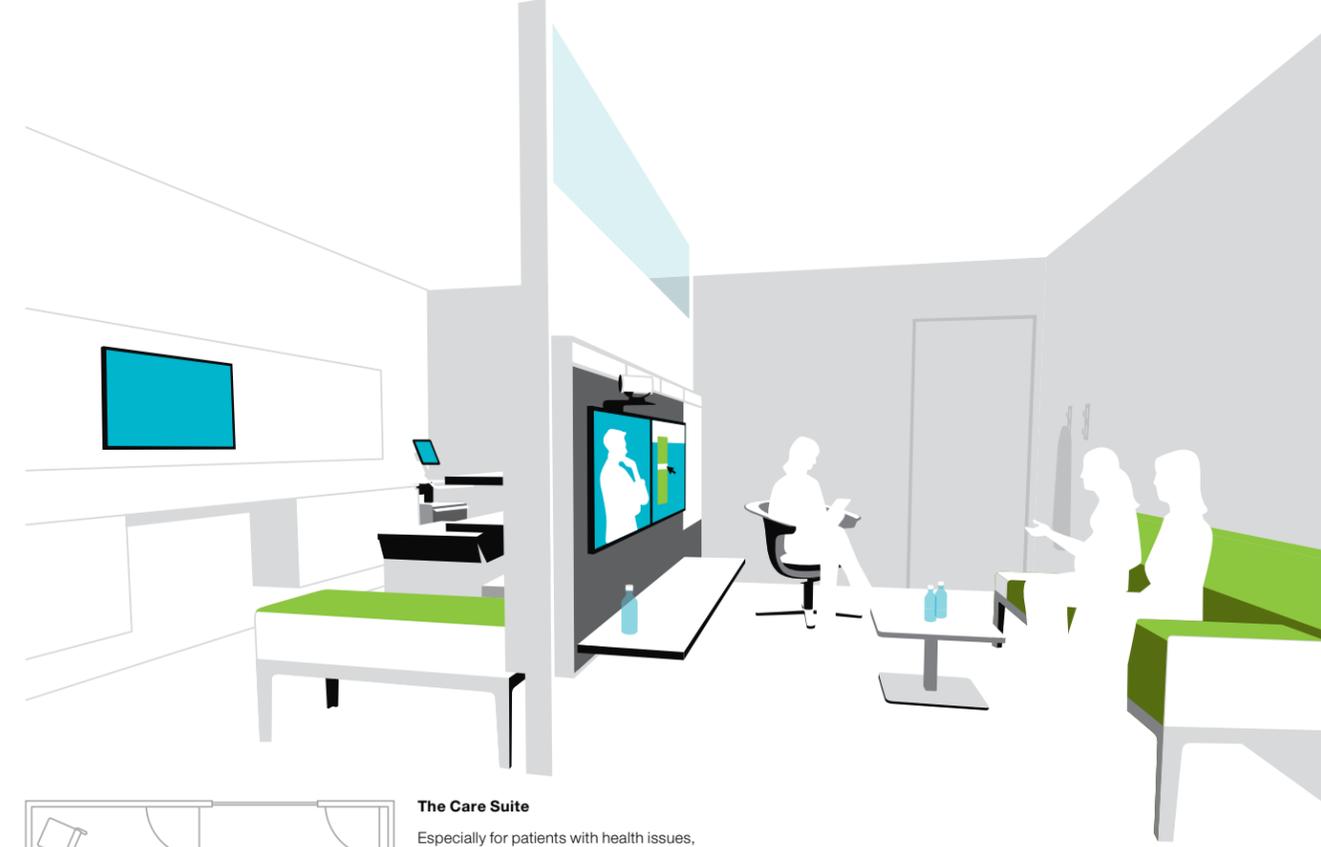
Multi-Purpose Exam Room

This space encourage patients, families and clinicians to exercise the new roles and relationships of connected health-care experiences. Exams, consulting and administrative tasks—like scheduling a follow-up session—can all be done right here.



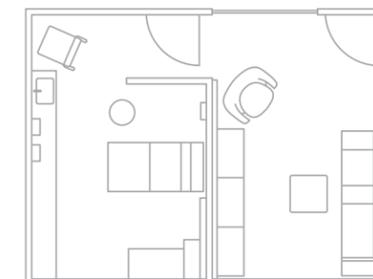
Consultative Care Room

High-performance spaces that emphasize information-sharing and collaborative decision-making. Not every appointment requires a medical exam. Sometimes scheduled time is spent reviewing x-rays, test results, medical data and treatment options.



Quick Care Space

These compact, semi-private exam spaces are a convenient, cost-saving option for primary-care patients who have simple, straightforward needs. Minimal clinical equipment is needed to perform the basic exams that take place here, and patients value the simplicity, ease and comfort.



The Care Suite

Especially for patients with health issues, having a two-room care suite to handle the medical exam and a consultation optimizes the appointment, offering support for examination and consultation, teaching and learning, with each activity taking place in a space that's best equipped to support it.



REIMAGINED EXAMS: SMARTPHONE PHYSICALS

To show how space and technology can work together to improve healthcare experiences, Steelcase Health partnered with Medgadget clinicians to provide Smartphone Physicals at three events: TEDMED 2013 in Washington, D.C., NeoCon 2013 in Chicago, and at the AARP Member Event in Atlanta.

The technology

Smartphone Physicals marry a smartphone, apps and accessories to perform non-intrusive physicals that include metrics for weight, blood pressure, oxygen saturation, lung function and other health indicators. In addition to showing how technology can make an exam more accurate, Smartphone Physicals engage patients so they are able to see what the clinician is seeing, says Johns Hopkins medical student and Medgadget editor Shiv Gaglani, a member of the clinical team.

The exam space

The Smartphone Physicals demonstrated how Steelcase Health's research-based applications and products enhanced the clinical team's ability to perform the physicals and improved the experiences of people receiving the exams.

The environments featured Empath™ recliners instead of exam tables, Pocket™ mobile worksurfaces and Verge™ mobile stools for clinicians, and Regard™ seating with integrated power outlets for people who were waiting. The Smartphone Physical experience wouldn't have been as positive without these innovative products, reports Gaglani.

"This space resolved what can be an awkward process of collecting and inputting patient information into a seamless, engaging process, bringing patient, doctor and technology together."

The experience

Overall, the Smartphone Physical environments demonstrated the value of supporting person-to-person consulting as an integral part of the exam process, reinforcing a key insight from Steelcase Health research: When healthcare providers and patients view information together, they communicate better and learn more.

As one Smartphone Physical participant, Roz Cama of Cama Design, put it: "You almost don't feel like a patient. You're just having an intelligent conversation with a colleague about something very important—your health."



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To see our insights, applications and solutions, download the guide at SteelcaseHealth.com/guide

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HEALTH

We work with leading healthcare organizations to create places that deliver greater connection, empathy and wellbeing for everyone involved in the experience of health.

