EXAM + WAITING EXPERIENCES REIMAGINED
This booklet explores two key issues facing healthcare. The first is how to evolve the exam room from an outdated space to one that builds new levels of patient trust and confidence—making them active participants in their care. The second article involves the waiting room experience: turning it from a passive environment to one that actively supports our physical, technological, and emotional needs.
Americans make nearly one billion trips to the doctor every year, nearly three trips annually for every man, woman and child. It’s a universal scene—the exam table with its crinkly paper, the iconic doctor’s stool and a stiff chair for a family member. Maybe there’s a computer mounted to the wall or on a desk.

Today, exam rooms must be reconceived in the context of doctor-patient interaction models to support modern needs. One model, known as Mutual Participation, is the focus of a study by Steelcase Health researchers and led to a new set of design principles, exam room concepts and ultimately to new product ideas, all created to transform exam rooms into spaces that meet today’s needs. Typical exam environments enable a fading model of care, despite clinicians’ desire to partner with patients and families, and the need for families and patients to be active participants.

Let’s investigate the factors driving the need for change, and set the scene for the exam rooms of tomorrow.

Transforming the Exam Room:
DESIGNING FOR MUTUAL PARTICIPATION
The Drivers

In exam rooms everywhere, patients and family members meet with doctors, discuss options and make decisions. More and more, those conversations aren’t just about curative steps—“take two tablets and call me in the morning”—type discussions. They’re about lifestyle and behavior changes needed to control and prevent chronic conditions like hypertension, diabetes and obesity. These aren’t simple one-and-done conversations.

These conversations require empathy, understanding and education. But today’s exam rooms don’t facilitate these types of interactions. Steelcase researchers found that eye-to-eye conversations are made difficult by outdated space configurations which emphasize the exam table as the most important feature in the room. Access to information required to reach mutual decisions is hard to share, whether it’s doctors sharing test results or patients bringing in their own research. Family members are often relegated to a side chair in the corner where they find it difficult to participate in the conversation.

“The patient-centered care movement has put an emphasis on addressing the healthcare needs, preferences and values of patients in order to effectively deliver care,” says Caroline Kelly, Steelcase principal researcher. “But most exam rooms are designed to support a doctor-centered process. The design doesn’t effectively promote eye-to-eye and face-to-face interactions that build relationships and enable shared decision making. Our research showed the design of the room gives little consideration to the needs of the patient beyond his or her experience on the exam table, or the family member who acts as a care partner.”
THE PATIENT-CENTERED CARE MOVEMENT HAS PUT AN EMPHASIS ON ADDRESSING THE HEALTHCARE NEEDS, PREFERENCES AND VALUES OF PATIENTS IN ORDER TO EFFECTIVELY DELIVER CARE. BUT MOST EXAM ROOMS ARE DESIGNED TO SUPPORT A DOCTOR-CENTERED PROCESS. THE DESIGN DOESN’T EFFECTIVELY PROMOTE EYE-TO-EYE AND FACE-TO-FACE INTERACTIONS THAT BUILD RELATIONSHIPS AND ENABLE SHARED DECISION MAKING.”

Caroline Kelly
Principal Researcher
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In those same exam rooms, physicians are faced with greater pressure to deliver more efficient care—to spend less time with patients and, at the same time, provide an exceptional experience. Clinicians are keenly and, some might say, painfully aware that patient satisfaction scores directly impact compensation models and influence patients’ choice of healthcare providers in an increasingly competitive environment. The addition of technology, with the recent wide adoption of electronic medical records, brings added complexity as it’s both a benefit and a barrier to the doctor-patient relationship, providing vital information but inserting an additional player in a small setting. Physicians struggle to adopt comfortable conversational postures and maintain eye contact while they chart from their stool, leaning up against a wall for awkward back support. The scene is further complicated by the fact that many doctors struggle daily with symptoms of mental and emotional burnout, feeling they’re on autopilot instead of hands-on healers.

“Clearly, today’s exam rooms aren’t built to support the model of care prevalent now,” says Kelly. “Today’s model is built on doctor-patient-family member collaboration—this is how doctors want to partner with their patients. Mutual Participation activates the patient-centered approach in the exam room. This is considered an indicator of high-quality care which is the priority of health organizations everywhere. By leveraging their built environment, they can further advance their mission.”
Healthcare Spaces and Interaction Models

History tells us that the doctor-patient relationship derived from the priest-suppliant relationship, placing doctors as healers and keepers of mystical medical knowledge. Patients were helpless to contribute to their own cures and only the doctor knew the ways of medicine and had the authority to conduct the rituals of healing. In this dynamic, the locus of control was with the doctor and the patient was seen as hardly more than a disease or condition, with little say in the situation.

Fast-forward two thousand years, and it’s apparent that this model doesn’t always work in today’s varied healthcare landscape. In certain situations, the physician still has the agency, or ability, to maintain control over the patient and focus on a specific illness or body part, such as when performing an operation. This was described by scholars Szasz and Hollender in 1956 as an Activity-Passivity model of care, where the doctor does something to the patient and the patient is completely inactive.

However, in other healthcare spaces and interactions, the dynamic shifts—agency is shared between the patient and doctor and the perspective of “patient as disease” transitions to “patient as person.” Szasz & Hollender describe this as a Guidance-Cooperation model like the interaction between a parent and child, where the doctor’s role is to tell the patient what to do and the patient’s role is to cooperate. This interaction can be seen in patient rooms, imaging suites and treatment areas where clinicians may be delivering medications or changing dressings, positioning a patient for a scan or administering chemotherapy. This model dominated exam rooms for much of the 20th century because the role of the doctor and patient were rooted in the tradition of doctor-as-healer and reinforced by advances in the treatment and cure of previously fatal diseases with the development of antibiotics and vaccines.
But Szaz and Hollender recognized that chronic illnesses required a different sort of interaction. They proposed a model of Mutual Participation which they described as “a doctor-patient partnership, where the doctor helps the patient to help themselves.” Mutual Participation is best suited for the care of chronic conditions because the treatment plan is carried out by the patient at home, away from the direct actions and control of the doctor. However, information sharing and decision making, central to the care of the patient, happens in the exam room. In *Doctors Talking With Patients / Patients Talking with Doctors: Improving Communication in Medical Visits*, researchers Roter and Hall describe patients as the experts on their own health experiences and doctors as the experts in medicine—both work together to address health concerns.

Where Guidance-Cooperation may have been sufficient in the past, Steelcase Health researchers believe that cultural changes and modern healthcare context now make the Mutual Participation model increasingly important and valuable.

**Defining Mutual Participation**

Based on these historical and academic models and through their own observational research and expert interviews, Steelcase Health researchers define Mutual Participation in three dimensions: Interpersonal Sensitivity, Egalitarian Presence and Shared Decision Making. Each of these principles is essential for transforming the exam room into a space that fosters patient-centered care.

Interpersonal Sensitivity addresses the fundamental orientation the doctor and patient have toward one another. The doctor approaches the patient holistically, not just as a disease or symptom. This biopsychosocial approach recognizes that a patient’s health is affected by biology, psychological factors like personality and mood and social factors like relationships, economic status and education. But Interpersonal Sensitivity is intended to work both ways—the patient also needs to recognize that doctors are people too, and bring their own values, experiences and needs to the interaction.
This sensitivity extends to communication patterns. In exam rooms, high-context communication between physicians and patients covers both verbal and non-verbal cues to convey meaning. Both doctors and patients rely on subtle shifts in posture, facial expression and physical distance to decode messages. For the doctor, this may provide clues if a patient is withholding information or is in pain. In an article titled, “Doctor-Patient Communication: a Review of the Literature,” researchers observed that patients may look to doctors’ non-verbal behaviors to understand how serious their diagnosis is or gain cues as to how they should be thinking or feeling under the circumstances.

While Interpersonal Sensitivity positions doctors and patients as multifaceted individuals, Egalitarian Presence addresses the dynamic between them. In the Mutual Participation model, the doctor and patient have approximately equal agency, are interdependent and engage in activities that are meaningful to both. The patient is encouraged to educate the doctor on his or her goals, preferences and values and engage in decisions about care. This, according to Szaz and Hollender, is built upon the philosophical belief that equality is valued and reflected in our culture.

A systematic review of research on patient decision-making roles found that there is a growing trend for patients to want to share in decision making with doctors. K. E. Flynn and colleagues reported in a 2006 study of over 5000 older adults that 96% preferred to engage in exchanging information with their doctors. A 2015 study in the International Journal of the Society for Medical Decision Making suggested that shared decision making has positive effects on patient satisfaction with care, patient understanding and a patient’s trust in the physician. For true shared decision making to occur, both share information, build consensus about preferred treatment and reach agreement on a treatment plan. Doctors, patients and their families need to be able to engage in shared decision making to the extent they desire and are able to. Regardless of their preferences, the design of the exam room cannot be a barrier to this interaction.
Designing for Mutual Participation

To support Interpersonal Sensitivity, exam rooms should be designed to support eye-to-eye conversation. Doctors, patients and family members need unobstructed sightlines to each other; at the same time, they need to be able to perform necessary tasks like charting without disrupting the connection with the patient. Doctors also need the ability to smoothly move between exam and consulting activities, and perform technical procedures as well as express empathy, like patting a patient’s shoulder or holding a patient’s hand. Patients need to be able to include their family members as critical supporters of their care, and help the doctor understand the patient’s social situation. Many exam rooms do not reflect any evidence of who the doctor is, as a professional, or as an individual. By sharing staff bios and photos on screen, physicians can help patients see their medical care team as more than just white lab coats, but as multidimensional people.

Egalitarian Presence means that the furniture, technology and physical placement in the room needs to be designed in a way that encourages participation from all players. For conversations, everyone is at the same seated height, sharing access to information on computer screens. Family members also need to be given a “seat at the table” so they can offer insight, observations and support to the exchange. When everyone is present in a way that allows for shared control, collaboration can occur more naturally.

Central to Shared Decision Making is information exchange, particularly in the age of electronic health records and abundant health information on the Internet. To promote transparency, exam rooms need to facilitate clinicians sharing the screen to review records, teach and engage patients in discussion. Such sharing can help the clinician demonstrate his or her interest in patient questions and perceptions about patients’ health. But traditional exam rooms place the monitor for the sole use of the clinician, creating a barrier to information sharing, and lack work surfaces that enable printed information to be reviewed.
Bringing It All Together

To support Interpersonal Sensitivity, Egalitarian Presence and Shared Decision Making, the exam room itself must contribute new ways to share information, examine patients and interact with both family members and technology.

Clinicians want to:

- Maintain eye contact with the patient and family while charting and understanding concerns.
- Adopt shoulder-to-shoulder positions to show patients and families data and actively discuss next steps.
- Switch to use their computers privately for quick tasks such as ordering labs or medication, or documenting sensitive information.
- Use their computers as teaching tools, sharing patient information or education through digital content.
- Be dynamic in the exam space and quickly switch between exam and consult activities without compromising their safety or comfort.
- Take care of their patients while also taking care of themselves—such as getting proper ergonomic support.

Patients want to:

- Minimize their time on the exam table.
- Feel they can ask questions, express preferences, or volunteer existing knowledge and self-guided research.
- Be listened to and understood.
- Participate in the decision-making process with the doctor.
- Understand what the next steps are.

Family members want to:

- Share pertinent information about medical history or behaviors.
- Be an advocate for the patient.
- Be included in the discussion.
For exam rooms to not only support physical examinations but also facilitate these desired behaviors, a new design paradigm is needed. Steelcase researchers call it The Diamond, and it allows greater involvement for clinician, patient and family, as well as shared access to information.

“The Diamond supports the key behaviors of Mutual Participation,” Kelly says. “The orientation of the participants allows eye-to-eye contact and shoulder-to-shoulder interaction, and includes the presence of information in the dynamic. In some exam rooms, the traditional exam table can be easily replaced with a lower exam chair, so now patient, physician and family members are all at the same level. Easy access to technology and tools allows for a fluid transition between activities, and a monitor displays important information for shared decision making.”

This new paradigm supports the behaviors that are essential for effective healthcare and maintaining personal relationships between patients and staff that impact satisfaction scores. It includes family as equally important in the patient’s health, and supports clinicians’ physical needs as well. Instead of being intrusive, technology is sensitively integrated into the experience to support conversation.

These insights from Steelcase research led directly to product design, resulting in a new clinician chair that’s mobile, flexible, ergonomic and supports both technology and charting. The Node with ShareSurface occupies a small footprint in the exam room but makes a big impact. “The Node with ShareSurface allows clinicians to quickly change positions in the room, and fluidly share their screen with patients and their families as they collaborate on their care,” says Kelly. “Research shows that shared decision making in healthcare can lead to improved patient outcomes, as well as improved satisfaction.”

The Full Experience

Exam rooms today must be hardworking, high-functioning spaces that encourage the activities, interactions and technologies that create and sustain connected, satisfying and effective health experiences. New paradigms like The Diamond must be incorporated into space planning, reconciling the desire for both empathy and clinical efficiency. The sharing of space and information is the new design principle for exam rooms.
The Evidence Is In:  
**BETTER WAITING ROOMS SIMPLY CAN’T WAIT**

It’s midafternoon in the waiting area of a large medical clinic. The door that leads to patient care areas quietly opens and patients’ eyes dart expectantly, hoping to hear their name called. The announcement is made; one name is called. Disappointment and anxiety ripple through the room. An older woman gathers her belongings that are spread out over a couple of chairs. She rises slowly, obviously in pain, and walks to the door, unsure what news awaits on the other side.

At the other end of the room, a family is trying to find space to gather and talk about questions they have for the doctor. They’ve moved toward a corner to find some privacy, but chairs are lined up in orderly rows from end to end, preventing them from being able to look at one another. Some sit, some stand, but no one looks comfortable.

A television mounted on the wall flashes cable news with the sound turned down so low it’s barely audible. A young man tries to balance his laptop on some magazines and juggle his mobile phone in an attempt to make more productive use of his time.
This familiar scene plays out across the globe every day at healthcare facilities of all sizes. Waiting rooms, at their worst, can look and feel like holding pens, designed to seat the most patients in as little room as possible, providing few physical or emotional comforts. At their best, these spaces can offer a smooth transition from physical pain and emotional uncertainty to vital information and relief.

Unfortunately, today, many patients’ experiences are less than optimal as they wait. Wait to meet with a care provider. Wait to learn a diagnosis. Wait to receive information. And the places where they wait—whether for minutes or hours—are all too often unpleasant and unappealing. Patients are left lacking—lacking privacy, information, storage space and access to technology. In these environments, the waiting room experience contributes to low expectations for the quality of care patients may receive from clinicians.

Steelcase Health researchers have found that positive waiting experiences and space design are linked with the perception of quality care, a key metric for today’s healthcare organizations. This insight offers practical implications: Well-designed waiting experiences that decrease stress and promote active engagement can help improve patient satisfaction scores both during waiting and subsequent care encounters. With pressure mounting to deliver more patient-centered care and better satisfaction scores, progressive healthcare organizations are already leveraging their waiting spaces as a competitive advantage, and seeing positive results.
“WE’RE WORKING WITH HEALTHCARE ORGANIZATIONS TO CREATE SPACES THAT ACCOMMODATE A RANGE OF ACTIVITY PREFERENCES, INTEGRATE TECHNOLOGY AND INFORMATION SHARING AND CREATE A SUPPORTIVE ENVIRONMENT. TRANSFORMING WAITING INTO PRODUCTIVE TIME MAKES THE EXPERIENCE MORE MEANINGFUL AND HELPS PREPARE PATIENTS FOR THE NEXT STEP IN THEIR JOURNEY.”

Michelle Ossmann, RN, MSN, PhD
Director of Health Environments
Steelcase Health

The Perception of Quality Care

Much has been studied, written, tracked and trended about patient satisfaction—but increasingly, academic researchers are focusing on the impact of space on perceptions of quality care. Patients want the best care, but often find it difficult to understand the differences in qualifications and expertise of individual staff members, clinical teams and overall healthcare organizations. While patients have more access to rankings, comparisons and data than ever before, it’s still hard to know what doctor or organization is best for them. So they rely on their experiences and judgment instead. They may not know an organization’s percentage of mortality and morbidity, but they often look to more subjective measures they understand—like whether they feel listened to, comfortable, and if the environment was tolerable.

This realization that space beyond clinical care areas and patient rooms can influence satisfaction scores brings the importance of well-designed transition areas into stark relief. This expanded definition of patient satisfaction is no longer contained to just interactions with clinicians—it’s the entire experience, including what happens in the transition space.

Just ask Ken Hutchensrider, president of Methodist Richardson Medical Center in Dallas, TX, who opened several renovated waiting spaces in 2014. “Going into this project, waiting rooms were not something we were focusing on or we thought would be a feature, and that would receive as much praise, but it’s turned out to be such a major element in this new hospital,” he says. “Our new waiting rooms are by far one of the best features of our new hospital.”
Creating Positive Transition Experiences

Steelcase Health researchers connected the dots and wondered if supportive transition space design would be reflected in measures of patient experience. We partnered with a major academic medical center in the southeastern United States to conduct several days of observations to understand the current realities of waiting rooms. Using proven research methods, Steelcase researchers observed and captured more than 75 behavior maps of patients and families over five days in the pre-study waiting room setting.

Specifically, the researchers’ aims were to:
- Identify seat choice, family group sizes and grouping patterns.
- Understand family needs and expectations to determine potential furniture and process changes.
- Examine the relationship between environmental variables and patient experience.

Across the board, Steelcase Health researchers identified four common mistakes in transition space design. Today’s waiting rooms generally feature:

- Not enough chairs with direct sight lines to information sources.
- No room to place personal items or technology devices.
- Not enough separation from strangers; no intentional group space for families to gather.
- Chair configurations for large groups, rather than seating for one or two.

Observations

Based on these observations, the opportunity to transform dull, uncomfortable transition spaces into welcoming ones appears to be one that could deliver immediate results. “Supportive transition spaces provide spatial separation and information for patients and their families,” says Michelle Ossmann, RN, MSN, PhD, Director of Health Environments for Steelcase Health. “We’re working with healthcare organizations to create spaces that accommodate a range of activity preferences, integrate technology and information sharing and create a supportive environment. Transforming waiting into productive time makes the experience more meaningful and helps prepare patients for the next step in their journey.”
According to Steelcase Health, three guiding principles should be used to influence healthcare design as medical organizations rethink their transition spaces:

• Balancing sight lines
• Rethinking density
• Creating separation and togetherness

In many waiting rooms, views to the outside and windows have been the traditional emphasis. While natural lighting and views are important, Steelcase researchers observed people orienting themselves toward information sources instead—wanting to see and hear the clinician call their name or see a status update on a monitor. Understanding this balance of sight lines between information and views to the outdoors creates the need for new ways of arranging seating and placing monitors. “Information can be the antidote to anxiety in waiting areas,” Ossmann says. “People are afraid to miss important information from healthcare providers.”

Seating density, often the primary concern for waiting rooms, is getting a fresh look as well. Steelcase Health researchers noted that only 80 percent of occupied chairs had people sitting in them—the remaining chairs held personal items or drinks, confirming decades-old research on seating preferences. By creating small group seating and accommodating storage, fewer seats are required for patients and their families—saving space and reducing financial investment while creating opportunities to deliver more patient value. “This isn’t about packing the most people in the waiting room,” Ossmann says. “It’s about responding to their behaviors in a more intuitive way—a way that helps relieve some of the stress of being at a medical facility. Simply giving people some additional physical space also gives them additional emotional space.”
“THE CHANGES WE MADE TREND POSITIVELY WITH PERCEIVED ENVIRONMENTAL QUALITY. UPDATING TRANSITION SPACES IS A VERY ACHIEVABLE CHANGE TO MAKE AND DELIVERS VALUABLE RESULTS ALMOST IMMEDIATELY.”

Michelle Ossmann, RN, MSN, PhD
Director of Health Environments
Steelcase Health
Steelcase Health researchers also observed that people prefer to be separated from strangers but close to family members. People even created work-arounds in the space to suit their differing social or privacy needs. But here’s the current reality: Waiting room design emphasizes individual seats next to each other, often in long, continuous lines. Designers and facility planners are often told how many chairs to plan for, and therefore respond with the most efficient layout—lining chairs up in uninterrupted rows. To achieve a balance of separation and togetherness, they can create zones that allow families and individuals different spaces to support their preferences and behaviors—ranging from family conversations to privately engaging with an electronic device to resting and reading. “When you’re faced with a medical issue, privacy is a big concern,” Ossmann says. “By providing for auditory and visual privacy, we’re supporting patient and family needs at the most fundamental level.”
The Delta: Creating Change

The second phase of our research involved creating more engaging transition spaces in one of our partner’s clinics—a specialty clinic that sees approximately 27,000 patients each year. Often, the clinic sees an average of 100 patients and family members a day, and wait times vary from 30 minutes to several hours. Because the clinic’s patients are immuno-suppressed, safety is of paramount importance.

Based on our recommendations, the clinic’s transition spaces were transformed through a combination of new furnishings and the creation of distinct zones. Due to wall configurations, it was necessary to keep some long rows of seats. But the space also included:

- Modular Regard seating—with wider seats and wider arm rests which provides greater comfort, connection and privacy.
- Double seats to create social opportunities and encourage family groupings.
- Cura chairs that feature a slight rocking movement and supplemental physical support for post-operative patients.
- An improved coffee space with a round café table.
- Optimal sideways views of both the outdoors and staff areas.
- Receptacles in seating bays for easy technology access and charging.
- Tables with space dividers for additional privacy.
- Easily wipeable coverings for improved cleanliness.

Steelcase researchers observed patient behavior in the new transition spaces with distinct zones. The most observed activity was patients interacting with family at 24 percent, while only one percent of patients talked on the phone.

- 23% Use Pad/Phone
- 3% Read Book
- 21% Not Engaged
- 3% Sleep
- 10% Watch TV
- 1% Computer Work
- 7% Interact with Another Group
- 1% Wear Headphones
- 6% Paperwork
- 1% Phone Call
- 1% Other Activities

24% Interact with Family
The Results

The post-study was completed in October 2015 by observing and mapping patients and their families in the clinic’s updated waiting space using the DOTTTM tool from BBH Design. Results from mapping sessions, surveys, and interviews show that patients prefer the updated waiting room on multiple metrics. The updated design resulted in:

- Increased comfort levels.
- Greater ability to perform activities.
- Easier access to power and technology.
- Additional speech and visual privacy.
- Added pleasantness from furniture, flooring, lighting, color scheme and pictures.

“We expected to see some positive movement,” says Ossmann. “The results we’re seeing show we’re moving in the right direction. We view these newly updated waiting areas as a potential competitive advantage for our customers and a more pleasant experience for patients. The changes we made trend positively with perceived environmental quality. Updating transition spaces is a very achievable change to make and delivers valuable results almost immediately.”
The Next Chapter in Patient Experience

As pressure ratchets up for healthcare organizations to deliver increased patient experience, few systems are leveraging the full power of space—particularly transition spaces—to help increase perceptions of quality of care.

Now, with the support of a body of research suggesting a link between transition spaces and perceptions of quality care, facility managers and designers are seeing the hidden potential transition spaces represent—and are taking action. No longer can the waiting room take a back seat to clinical spaces as contributors to patient experience. The time to rethink waiting rooms is now.

Steelcase Health researchers have found that supporting physical and psycho-social needs and space design are linked with positive experiences, a key metric for today’s healthcare organizations. This insight offers practical implications: Well-designed waiting experiences that decrease stress and promote active engagement can help improve patient experience both during waiting and subsequent care encounters. With pressure mounting to deliver more patient-centered care and better experience scores, progressive healthcare organizations are already leveraging their transition spaces as a competitive advantage, and seeing positive results.