The Design Imperative: An Antidote for Clinical Compression

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Seeking care, you enter. You are not alone. Others also are scheduled for appointments today. You step back and wait your turn. Now registered as a patient and with papers in hand, you take a seat in a sea of chairs. Television, telephones, texts, and the traffic of staff, couriers and carts create their own noise, each taking a piece of your peace away.

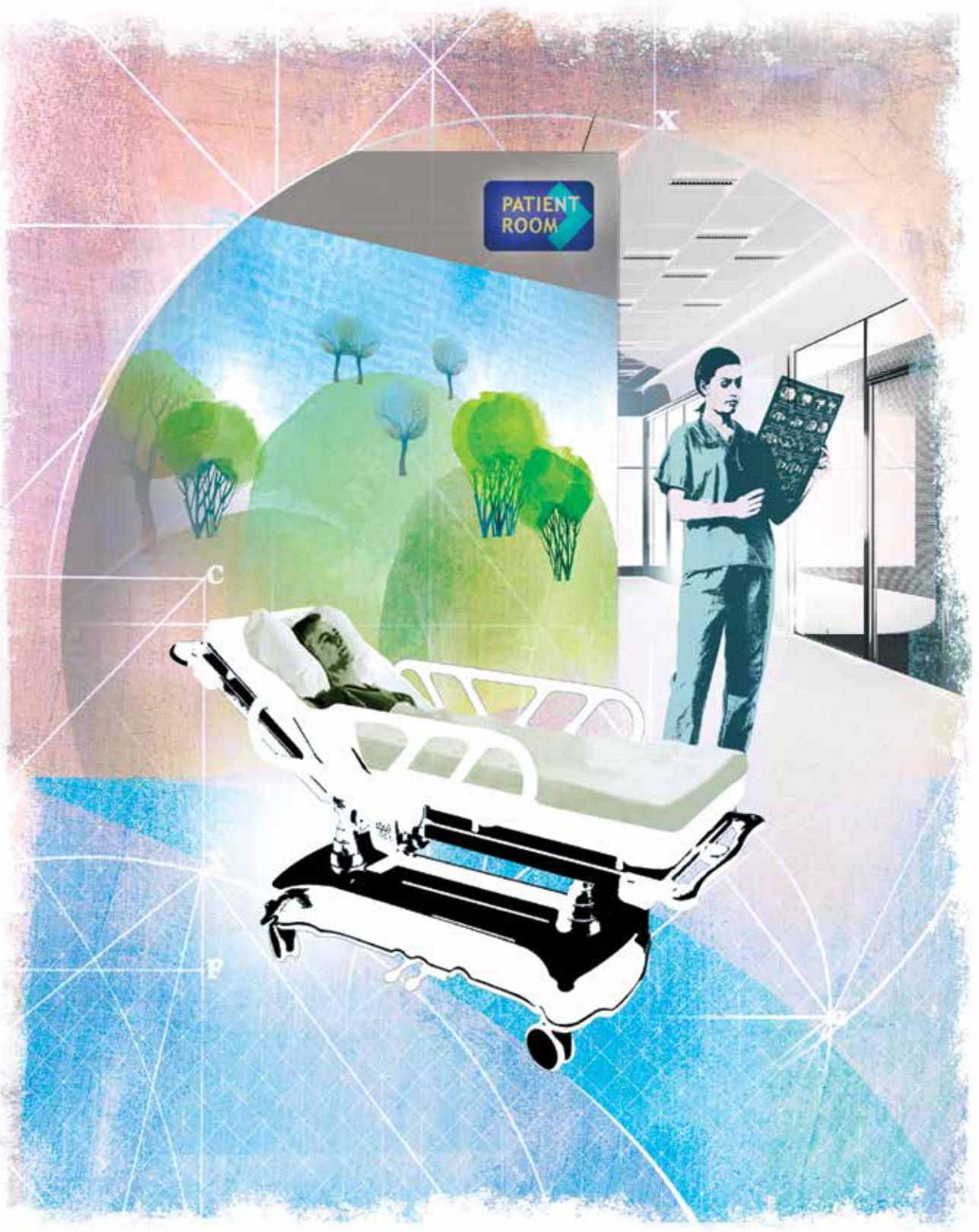
Supporting care, you assist. You are family, friend — a visitor to a health care setting. You are surrounded by a milieu of players consumed by their own conversations, circumstances and matters requiring coordination; all are navigating details and decisions that include translation, interruptions and distractions. Layer by layer, tension builds. Meanwhile, you long for simplicity amidst an industry of inherent complexity.

Delivering care, you respond to patient, family and system demands. As the knowledgeable practitioner responsible for the optimal experience, you, like patients and families, seek peace and simplicity. The physical and psychological demands numb your senses and dull your attention to the noise of alarms, communications and the cadence of activity.

Whether it's the patient, family or provider experience, health care complexity drives fragmentation and frustration. Does this describe your experience in a health care setting? Has the obvious become invisible? Do you acknowledge stressors from activities and the environments in which they occur? How can awareness be elevated to expose the conditions that lead to clinical compression — greater demands on providing care with fewer and often changing resources? What can be learned from the environment when factors that cause stress exceed human adaptive capacities? As every available resource at health care employees' disposal is being leveraged for operational effectiveness, it's time for greater awareness of the health care environment and its impact.

THE CHARACTERISTICS OF A CLINICIAN

Health care workers, including nurses, physicians and pharmacists, continue to earn Gallup poll's highest ratings from Americans for their honesty and ethical standards. For instance, more than 4 in 5 Americans rate nurses as "very high" or "high," earning them the top ranking among a diverse list of professions for the 17th consecutive year in 2018. At 3.5 million strong, nurses represent the largest segment of the nation's health care workforce. There are many motivations to pursue this caring profession. Nurses tell of their own experiences with illness or those of a loved one, of the inspiration to ease human suffering, or simply the spiritual calling to serve. Nurses seem to be selfless by nature. As caregivers, nurses are known to prioritize the needs and care of others in lieu of their own. With this sense of altruistic purpose, how does the human spirit compete with the psychological and physical demands that the delivery of health care imposes?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CLINICAL COMPRESSION AND CAPACITY

Contemporary clinical practice is challenging and complex. Medical advances and the technology explosion require learning and unlearning at the speed of change. This drives endless re-engineering of an enterprise created for a model of care that no longer exists. Clinical compression is produced by doing more, better, faster and with fewer and changing resources to support it. Clinicians overcome extraordinary complexities amidst extreme constraints; their efforts may, in turn, conceal the true nature of the environment's insults and shortcomings. Stress results from responding to these realities. Left unchanged, care providers experience a diminishing and ever-narrowing band of their emotional and physical faculties, affecting the capacity for care — and the capacity for who they are as caregivers. At the end of the day, clinicians are human beings caring for human beings.

Evidence continues to mount regarding the symptoms of clinician stress. The Institute for Healthcare Improvement's 2017 white paper, *Framework for Improving Joy in Work*, notes that if burnout in health care were described in clinical or public health terms, it might be called an epidemic. Nearly half of nurses exhibit substantial symptoms of work-related burnout.[1] Many factors, latent and active, system and individual, interact to cause patient safety incidents. Human factors are important contributors, and recent research indicates the importance of staff well-being.[2] Thus, there is reason to explore every available resource to remedy this reality.

Health care leadership has never been more committed to employee engagement, retention and well-being. Many health care systems have measures that support work-life balance, collaborative staffing models, shared governance and the development of contemporary leadership competencies. These competencies include support and advocacy for interprofessional practice partnerships, applied evidence that informs decision-making and systems thinking to improve the full continuum of care. Yet clinicians around the world are stressed, overworked and burned-out. According to Abraham Maslow's hierarchy of needs, individuals can't reach their full potential if they are struggling with basic needs.[3] Emphasizing the importance of relationships, team building and well-being is essential in a caring ecosystem.

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While increasing emphasis is placed on programs that enhance engagement and performance, there is an alarming absence of attention to measures that address the impact the physical environment can have on human experience and performance. At the same time, a growing body of knowledge suggests that the physical health care environment can greatly contribute to health professionals' overall experience by either supporting or inhibiting work performance, staff safety and occupational stress, as well as job satisfaction and retention.

THE CLINICIAN AND THE ENVIRONMENT OF CARE

Consider the settings where care encounters occur. It is sacred ground. Patients trust their vulnerabilities and imperfect natures to others for intervention, in hopes for a better well-being. The relationship is not entirely unlike that of a pastor and a parishioner. The history of the great religions reminds us of the redemptive qualities of our sanctuaries, our cathedrals, tabernacles, monasteries and temples. These holy places are designed to create the conditions for receiving and believing, as if to prompt healing of a different kind — the soul. How might we learn from that?

We live in a physical world, experiencing the world through our senses. Some 90 percent of us spend 90 percent of our time in, near, or influenced by the built environment.[4] Empirical studies show that 10 percent of what determines the quality of individuals' health is their physical environment.[5] The "health of houses" described by Florence Nightingale in the 1860s addressed, even then, ways that the environment defends health, prevents disease and protects caregivers.[6] We are indelibly connected to our surroundings. Buildings "hold" us, suggesting they can be a physical and a psychological refuge for health and healing. But, like a body, a building cannot heal on its own.

DESIGN LITERACY

Those who embrace space as a clinical specialty are committed to the cause of greater environmental awareness. Yet, as important as environ-

ment is to care, many academic institutions lack curricula to provide this knowledge to today's medical professionals. When students are introduced to health care disciplines, the "environment of care" often defaults to The Joint Commission standards of compliance related to fire, safety and regulatory readiness. If practice standards enhance outcomes, then shouldn't facility standards related to the built environment do the same? Today, The Joint Commission is to clinical best practice what the Facilities Guidelines Institute is to health care facility design best practice. Conceived in the Hill-Burton era, when the law supported the construction of more hospitals and clinics in the nation, the Facilities Guidelines Institute exists to guide best practice in the health care built environment. As an independent nonprofit informed by practicing experts in research, design, operations and construction — the institute produces minimum standards for health care facilities.

Clinical best practice is accepted as evidence-based practice. In the 1980s, a seminal study by Roger Ulrich correlated the reduced post-operative length of stay to room settings with a view of nature. As a result, evidence-based design was born. Today, there are over 1,500 scientific articles that link physical design to health care outcomes. This emerging science elevates the industry, the importance of research and the responsibility of the professionals who commit to planning, design and construction of health care facilities.

Knowledge is power. For clinicians seeking to understand, network and collaborate as health care design evolves, the Nursing Institute for Healthcare Design is the voice for leadership, education and advocacy. In just a decade, this organization has earned the reputation as a trusted advisor to the Facilities Guidelines Institute and the Center for Health Design communities, as a partner and resource providing clinical points of view on planning for the design industry and academics. These organizations exist to improve health outcomes by leveraging design. The work shapes the future of health care environments.

If we know this, then why do so many of our health care environments remain essentially unchanged? If the design of the built environment makes such a difference, why don't we think more about it? Policies, protocols and practices constantly change — but the same awareness has not been focused on the "where" of care. The location, the place where care is given — that space matters. Greater awareness is a necessary antecedent for progress in the movement to raise the design imperative as equal to the therapeutic imperative. Who better than nurses or clinicians to be an integral part of designing the care experience — and the environments of care?

ENVIRONMENT AS AN EXTENSION OF HEALING

As prevailing pressures challenge clinical performance, the emergence of environments to combat fatigue and burnout are worth highlighting. While no single design intervention will produce significant and sustainable results, a compelling question to ask is "do our design decisions make care more, or less, human?" It is critical that the design supports the caregiver's ability to provide safe and effective care to every patient, every time.[7]

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Let's take a typical break room on an inpatient unit as an example. According to building code, health care environments require staff lounges or break room areas. There is a consensus that clinical care environments are cluttered and chaotic. Try this challenge: tour a break room, and it's likely the clutter and chaos is worse. In most cases, the settings are a complete contradiction to the perception of "a break." These rooms often serve multiple purposes, from food preparation (refrigerator, microwave, sink, food storage and more), restroom facilities and locker storage. They post employee announcements, community signage, team memorabilia, reference materials. They often have a television, entertainment for some, noise to others. Break rooms that include a window, natural light, comfortable seating and adequate locker capacity — features that many workers appreciate — might almost seem to be a luxury. According to the Facilities Guidelines Institute, lounge facilities should be no less than 100 square feet (9.29 square meters). A 10-foot by

10-foot room serving multiple staffers and multiple functions is hardly sufficient space to support a sense of separation from constant stimuli.

This example highlights not only the norm, but the need for attention to design features in health care environments. Architect Adeleh Nejati, PhD, surveyed 1,000 medical surgical nurses for an evidence-based design study. She investigated the main restorative components of staff break areas in health care facilities and the features of break areas perceived as being well-designed by those who used them. The results revealed that staff break areas are more likely used if they are:

- in close proximity to the patient care assignment
- allow for complete privacy from patients and families
- accommodate individual privacy or socialization with co-workers by choice
- support access to outdoor spaces compared to window views, artwork or indoor plants

There is nothing about this study that is a revelation — other than that the current state of break environments is clearly very different from the preferred state. Instead, it shows nurses and other clinical staff have fundamental and simple desires for break areas. It reinforces the innate human need for peace, privacy, nature and choice. Surroundings affect the quality of the experience. "When one designs something, they do not design only objects, or only buildings — they design the life of people. And this understanding cannot be cut away from the design perspective."[8] Accepting the environment's influence upon human behavior, there is reason to include restorative design elements as an antidote for seemingly unavoidable noise, clutter and chaos. Health care as an industry would do well to support research which points to design features that should be replicated and workplace cultures that are supportive of on-site restorative spaces.

The 2018 Facility Guidelines Institute "Guidelines for Design and Construction of Hospitals" brings in to clear view the importance of support areas for staff. The spaces are called "staff rest areas" and should be provided to every unit that assumes care for patients overnight.[9] Organizations that support such spaces include The Joint Commission, Veterans Health Administration, Agency for Healthcare Research and Quality, and the International Association for Healthcare Security and Safety in its design guidelines. Suggested attributes of "staff rest area" environments include:

- access to daylight
- views of the outdoors
- restricted from public access
- readily accessible to the work unit
- independent from staff on-call rooms
- carpeting for noise control
- a single residential bed
- storage space for linens

The terminology can be confusing. A meditation room, staff lounge, break, respite or on call room, are not one and the same. Elevating awareness and advocating for areas that support harmony and wholeness is not only necessary, but essential to restore the human spirit for healing. Further, this article includes a call to action for leadership to champion support of it. Health care systems or facilities that rethink restoration spaces can start with considering privacy, beauty and simplicity. For reasons already identified, the conventional approach to an environment for breaks does not align with the healing environments we espouse to create.

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CONCLUSION

At the center of the patient experience is the caregiver experience. Workplace design has a significant impact on clinician behaviors, attitudes and well-being that then influences clinical practice and health outcomes. Further, health care is long overdue in completely recognizing how critical well-designed clinical environments are for treatment and well-being and how important it is for the culture to support them.

According to architect Frank Gehry, "I approach each building as a sculptural object, a spatial container, a space with light and air, a response to context and appropriateness of feel-

ing and spirit. To this container, this sculpture, the user brings his baggage, his program and interacts with it to accommodate his needs. If he can't do that, I've failed."[10]

People and places possess the capacity to heal. Ideally, whether one seeks care, supports care or delivers care, all will realize that the design imperative of the health care environment is not self-indulgent, but rather self-evident.

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NOTES

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