DESIGNING FOR PATIENT PRIVACY

SOUND DECISIONS: WHY ACOUSTIC PRIVACY MATTERS IN HEALTHCARE ENVIRONMENTS

White Paper 2026

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Introduction

Human emotion is amplified in hospitals.

They are places where life begins with the guttural cries of childbirth and where fear, embarrassment, and hope coexist in the same conversation. In healthcare environments, where people are physically exposed and emotionally raw, care depends on something fragile: trust.

Patients must speak openly about symptoms, histories, and fears, and clinicians must listen closely to understand what care is needed. Laws like the Health Insurance Portability and Accountability Act (HIPPA) recognize how essential this confidentiality is. Yet inside many healthcare environments, the design of the space itself undermines that trust. Conversations spill beyond walls and voices carry down hallways. This noise can compromise the quality of care.

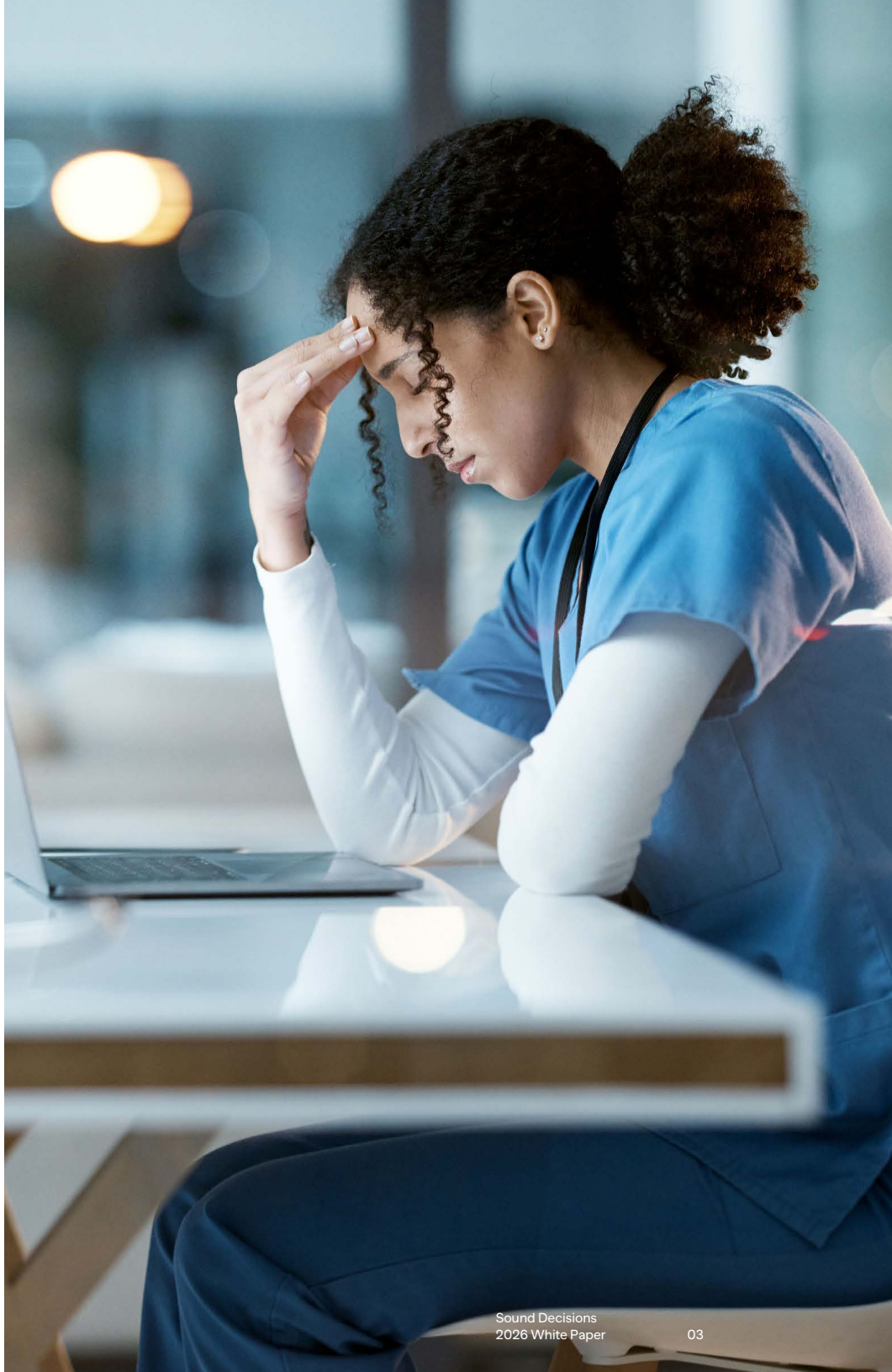
CHAPTER 01

Noise and well-being

Both the Faculty Guidelines Institute—the standard bearer for healthcare design—and the World Health Organization (WHO) have set for patient areas a maximum acoustic threshold of 40 Noise Criteria (NC) /40 dBA, respectively—noise akin to a library whisper.

> Yet studies of the past decade have consistently found these spaces measure 50 to 70 dBA[1], a level somewhere between an electric toothbrush and vacuum cleaner.
>
> ICUs and operating rooms trend even louder, reaching measurement above 80 dBA[2]: the equivalent of a whistling kettle.

This increased noise can adversely affect the recovery time of patients; it also can degrade the mental health of caregivers and job performance of providers.[3,4,5] Noise is known to make it challenging for patients and providers to communicate as well as protect the privacy of the personal health information (PHI) being exchanged, even despite HIPAA mandates.[6]



Cost constraints impact flexibility and privacy

Exam rooms and personal offices can provide environments for private discussions, but these fixed spaces increasingly collide with healthcare facilities' financial and operational needs. Building dedicated rooms is expensive, with the average cost of hospital construction $440-$450 per sq. ft.[7] Add to that frequent code and use changes, and it's sensible to conclude floor layouts are best left flexible and equipment made portable.

Shared spaces—such as open-plan and bullpen-style work areas—facilitate collaboration but reduce opportunities for confidential conversations. Even respite rooms, which offer patients and caregivers a momentary break from the floor's activity, tend to be the first casualties in cost-cutting cycles, as their footage does not directly generate revenue.

Thus privacy, both auditory and visual, is often sacrificed in the name of space efficiency. Kevin Meek—Haskell AEC's Vice President of Advisory Services and a R.N.-B.S.N. who holds degrees in Healthcare and Healthcare Innovation, among other credentials—describes how that choice can impact patient triage in a crowded E.R. "We're trying to assess people as quickly as we can," begins Meek.

> "There's a nurse in one corner, taking vitals, and other patients are waiting in the hallway. There's no way to have conversations [about people's medical needs] while always abiding by HIPAA guidelines."

One doctor who has worked in emergency rooms in New York and Miami confirms that "hallway medicine, " as he calls it, frequently happens in the ER, challenging auditory privacy. "There have been times I have been talking with a patient at a normal volume," he says, "and another patient on a stretcher several feet away has chimed in on our conversation."

This lack of auditory privacy can erode patient-provider trust. It also can become a barrier for care. In one study of E.R. patients, 4% of the 105 respondents admitted that they changed or withheld medical information because they feared it would be overheard by an unauthorized party.[8,9]

CHAPTER 02

Cost, flexibility, and privacy

Common ad-hoc privacy solutions, such as curtain enclosures and movable screens, provide visual separation but do little to muffle sound. Patients are aware of this, with their preference for rooms with solid walls well documented.[10],[11] Other workarounds, such as shuffling patients into a room when they have something sensitive to discuss and then back into the hallway, can be disruptive mentally and physically.

Another answer to this quandary could be privacy pods. A staple of offices and co-working spaces, these portable, self-contained rooms offer a quiet place for conversation or focused work. Often, they also can be relocated and reused as needs shift.

The units have a myriad of potential applications in healthcare environments. For example, they could be used in waiting rooms, providing visitors with a private place to work, process tough news, or take calls while being near a loved one receiving care. The units also could offer providers and patients a spot for telehealth appointments.

Those overstimulated by the bright lights and unpredictable noises of hospital—a common challenge for autistic and neurodivergent individuals [12] —may find sensory respite in the pods. Such resets decrease anxiety and improve one's ability to communicate with medical staff. [13],[14]

Privacy pods to protect and retain staff

The most powerful pod application, however, could be to reduce healthcare providers' mental load.

> "There is a lot of demand from caregivers to have a quiet, easily accessible place where they can collect their emotions before going back out on the floor,"
>
> Stan Gray, Vice President of Healthcare for OFS and Carolina

"Healthcare professionals have told us they are as stressed about high-stakes decision-making as family members, but going to a staff room or break lounge is not enough."

Meek, the healthcare executive and registered nurse, echoes the sentiments. "Being able to have a moment of peace without leaving the unit is one of the hardest things to do," he says. "You have to stay nearby in case someone needs you or has a question."

He ties respite to staff retention, mentioning the healthcare profession's endemic levels of burnout.

“Ten years ago, [healthcare design] was all about patient experience,” he says. “Now, with the shortage of healthcare professionals, we have to take care of the caregivers.”

Kevin Meek, RN-BSN
Vice President - Advisory Services,
The Haskell Company

CHAPTER 03

Silencing the noise

While acoustic privacy pods could address several of healthcare's auditory challenges, no current version of them can withstand the rigors and realities of medical facilities. These requirements include having ventilation that meets healthcare codes as well as surfaces that are easy-to-clean.

To achieve the solution, some design tweaks would be needed to the pods' form. But much also could be achieved by utilizing different tactile and sound-dampening materials inside them. Replacing the standard carpeted floor, felt walls, and wooden accents, these textiles and finishings would need to be durable and nonporous enough to survive hospital-grade cleaners and meet infection-control protocols.

A healthcare trial for privacy pods

A handful of medical facilities are experimenting with privacy pods modified to meet healthcare needs. Charleston-based Medical University of South Carolina (MUSC) Clements Ferry Pavilion has integrated a half-dozen privacy pods into its waiting spaces, staff break rooms, and consultation zones. The one-person Phone Booths, which achieve up to a 32 dB reduction in sound, feature a proprietary bleach-cleanable textile that has a moisture-barrier surface. The textile meets all healthcare codes and infection-control protocols.

All of the Booths also have built-in ceiling fans and an airflow system that is SCS Indoor Advantage Gold-certified, the highest level of indoor-air quality performance.

Thus far, the Booths have been getting positive reviews Patients and caregivers at the 80,000-square-foot facility have cited that these flexible solutions enhance privacy, improve focus, and elevate personal comfort.

Some of these elements can be found in current telemedicine solutions. But these products aren't without tradeoffs. For example, the exam-room-in-a-box, fitted with touchscreens and diagnostic tools, can be costly, difficult to move, and limited to a specific purpose. Other healthcare-leaning models such as the enclosed lactation pods dotted throughout airports are sound-dampening but not soundproof, as to allow for air circulation and permit the occupant to hear overhead announcements.

In healthcare, acoustic privacy is not a luxury: It's the law. Yet this core component of communication, patient dignity, and employee well-being remains a persistent problem in hospitals and clinics. A flexible, cost-effective solution that can uphold HIPAA mandates; meet infection-control standards; and offer moments of respite to patients, staff, and visitors remains elusive. But the need persists.

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