

**CASE AND COMMENTARY: PEER-REVIEWED ARTICLE**

**Why Is Hospice One of the Few Health Care Environments Structured for Peace?**

Grayson Holt, MSW, MA and Johanna Glaser, MD

**Abstract**

Historically, Western medicine has recognized health care environments as vital to patient well-being and enhanced clinical outcomes. Yet most modern Western hospitals are primarily designed and regulated to promote safety and minimize risk rather than to enhance comfort or serve as therapeutic environments in and of themselves. Hospice stands out as one of the few places within the Western health care service delivery system in which the structures and spaces of caregiving are viewed as key to patient-centered practice. This commentary on a case suggests the importance of designing health care environments that center patient experiences of well-being throughout the lifespan, not just at the end of life.

**Case**

AC is a 68-year-old man with glioblastoma. After surgery to remove as much of his tumor as possible, he is now undergoing several rounds of radiation and chemotherapy. AC sees his oncologist, Dr M, for follow-up. While in the waiting room, he reads a brochure about hospice and the importance of a peaceful environment for end-of-life care. In his visit, AC reflects on his stressful, uncomfortable surgery and recovery experiences during his inpatient stay. “It doesn’t make sense that hospitals can’t be more supportive places for patients and their families. Why should I have to be in hospice to receive care in peace?” Dr M listens to AC and considers how to respond.

**Commentary**

To best answer patient AC’s question, it makes sense to first acknowledge that the environment of health care has been recognized as vital to patient outcomes and well-being since the inception of Western medicine. The Asklepíeia of Ancient Greece, often considered the first, rudimentary hospitals, were explicitly designed to serve as healing sanctuaries with access to the natural world, baths, gymnasiums, art, and places of spiritual worship.<sup>1</sup> Likewise, Florence Nightingale, the founder of modern nursing, wrote of a “healthy environment” as a key element of healing. Beyond cleanliness and sanitation, she emphasized the importance of providing patients access to fresh air, natural light, views of natural landscapes, and a healthy diet.<sup>2</sup>

In contrast, modern hospitals are designed and regulated primarily to promote patient safety rather than to serve as therapeutic environments in and of themselves. For example, the Joint Commission, the oldest and largest standards-setting and accrediting body for hospitals in the United States, evaluates the “environment of care” based on the handling of the following: (1) “environmental safety,” (2) “security of everyone who enters the facility,” (3) “hazardous materials and waste,” (4) “fire safety” and emergency preparedness, (5) “medical equipment,” and (6) “utility systems.”<sup>3</sup> These standards indicate that safety is the primary concern when accrediting hospitals; it is notable that there is no mention of patients’ experience of the **environment of care** or how that environment itself might promote well-being as opposed to simply minimizing potential harm.

### **Environments and Patient Care**

The failure to incorporate patient experience in standards setting in hospital design is important because research suggests that the built environment of hospitals directly impacts patients’ experience of care and their health outcomes, such as levels of pain, stress, anxiety, and access to privacy and social support.<sup>4,5,6,7,8</sup> For example, reducing hospital noise and introducing pleasant sounds such as music can reduce patients’ anxiety while improving their satisfaction and sleep quality.<sup>9,10</sup> Indoor plants in hospital rooms of patients recovering from surgery can help lower blood pressure and reduce analgesic use,<sup>11</sup> and rooms with windows offering natural views can reduce postsurgical inpatient recovery time.<sup>12</sup> Similarly, rooms with more sunlight have been shown to reduce length of hospital stay after admission for myocardial infarction and bipolar depression.<sup>13,14</sup>

As more studies demonstrate the **impact of the built environment** on patients’ health and well-being, there has been a push to incorporate evidence-based design (EBD) into the planning of health care environments. In the context of health care, EBD is an iterative methodology that uses the best available data on patient outcomes from research and ongoing monitoring of the impacts of design interventions to promote enhanced clinical care.<sup>15,16,17</sup> In addition, EBD considers patients’ qualitative experience of care as a key outcome measure.<sup>18,19</sup> As a stakeholder-engaged method that incorporates patient feedback as well as the most up-to-date evidence base, EBD thus lends itself well to expanding the values of hospital design to include more holistic, patient-centered aims. With the aid of EBD, we might begin to conceptualize hospitals as places where patients with acute illness go to receive targeted interventions not merely in an environment that is safe and minimizes harm, but in one that is safe and attuned to their experiences in a manner that enhances clinical outcomes.

### **Barriers to Peaceful Environments**

In addition to having to meet modern hospital accreditation standards that focus on safety, hospitals may, depending on the context and acuity of care, need to prioritize patient safety over comfort. For example, patients undergoing surgery have clear needs for specialized equipment, lighting, and sterility that limit environmental features that could be more soothing. Similarly, patients in the intensive care unit and postsurgical patients require specific interventions and frequent monitoring that govern most aspects of the environment of care. In such cases, the lack of a peaceful environment is largely clinically appropriate. Small changes that benefit patients, however, such as enhanced natural light or views of natural objects, could still be utilized in rooms outside of the surgical suite, as evidenced by the studies cited above.

Health care systems also must balance effectiveness, financing, and efficiency. Hospitals are becoming increasingly expensive to build, with the average cost per square foot increasing by more than 20% between 2019 and 2024.<sup>20</sup> Additionally, they must accommodate complex infrastructure and technologies while adhering to safety codes.<sup>21</sup> The growing influence of private equity in medicine and pressures for financial profit may be a barrier to centering the patient experience in hospital design.<sup>22</sup> Architectural renovations could require temporarily closing otherwise functioning, profitable patient rooms, and improved patient outcomes don't necessarily translate to increased health care profits. These exigencies speak to an interesting point of ethical tension between the ideal role of health care facilities and the pragmatic needs of hospital administration and payment structures.

### **Scaling Up Patient-Centered Care**

As patient AC aptly points out, hospice care stands out as one of the few places in modern Western medicine where the environment of care is carefully considered in a patient-centered way, in keeping with the stated aims and values of hospice and palliative medicine. The Centers for Medicare and Medicaid Services defines palliative care as “patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs to facilitate patient autonomy, access to information, and choice.”<sup>23</sup> Hospice and palliative medicine thus explicitly takes a holistic approach to patient care and places a high value on patient autonomy. Additionally, hospice and palliative medicine extends the application of the principle of beneficence from primarily fixing illness and injury while minimizing harm (nonmaleficence) to actively working to optimize quality of life.

Hospice, however, is not the only place in modern Western medicine where attention to patient experience is being utilized to promote better patient outcomes. For example, in recent years more attention has been paid to the environment of labor and delivery wards. Birthing centers based on midwifery and wellness models are on the rise,<sup>24</sup> and birthing rooms in traditional care settings employing peaceful elements—such as less clinical-looking décor, scenes of nature projected on walls, and classical music or nature sounds—have been shown to lower rates of preterm births and cesarean sections while increasing rates of successful early breastfeeding and measures of patient satisfaction.<sup>24,25</sup> Similarly, acute care for elders units that are designed for patients over the age of 70 years and that utilize simple interventions, such as minimizing sleep disruptions and promoting access to natural light during the day to reduce delirium, have become increasingly common in hospitals and have been shown to reduce loss of independence in activities of daily living, among other benefits.<sup>26</sup> More recently, hospitals can participate in the Geriatric Surgery Verification Program by implementing 30 evidence-based standards of care for patients 75 years of age and older undergoing inpatient surgery, including by ensuring geriatric-friendly patient rooms.<sup>27</sup>

While it is appropriate to design health care environments suited to patients' specific clinical needs and degree of medical acuity, greater emphasis on patient-centered care need not come at the expense of patient safety, and implementing EBD during hospital construction and reconstruction also need not incur a heavy burden of cost. Incorporating more holistic values in the ethos of hospital design and in the accrediting standards of hospitals could be an important and reasonable step toward promoting a more peaceful environment for patients, their families, and health care workers alike.

## Conclusion

Patient AC's question is difficult to answer in a succinct manner because it gets at broad questions about how we conceive of health care environments and patient-centered care beyond hospice and palliative care settings. Yet it offers an opportunity for his caregivers to learn more about his values and work toward better supporting him. In light of this understanding, we suggest the following as good responses to AC:

1. *It must be frustrating to feel that you can't access care in an environment structured for peace while you are pursuing active treatment. Can you tell me more about what makes an environment feel peaceful to you and why peace in particular is important to you in the health care setting?*
2. *Modern hospitals are designed in a way that prioritizes safety, which can mean that the quality of your experience as a patient gets less attention than it is due. Let's brainstorm together how we might make your next hospital stay more comfortable. For example, I've seen patients bring blankets and pillows from home, place photos of loved ones on the wall, or bring music that can be played near the bedside. You might also be able to ask to reduce the number of monitors in your room or have labs drawn or medicines brought later in the morning to help you get more sleep.*
3. *I share your concern about the lack of peace in many of our health care environments. In some cases, though, like when you were directly coming out of surgery, it is appropriate to have a lot of equipment and monitors in the room, which isn't always comfortable for you as the patient. In many cases, though, there are small changes that hospitals could and should try to implement to make the environment more peaceful, such as offering soothing music or working to reduce noise in the hospital rooms once patients are in a more stable condition.*

In conclusion, while it is not always feasible to promote a peaceful environment in health care, extending the application of the principle of beneficence from promoting safety to promoting more holistic and healing health care environments—and in settings beyond end-of-life care—would not only enhance peace but likely result in improved quality of care and patient outcomes. Thus, on ethical grounds and in keeping with the basic goals of health care provision, where changes incorporating a more **holistic view of the environment** of care can reasonably be implemented, such improvements should be prioritized.

## References

1. Chatzicocoli-Syrakou S. The Asklepion's healing environment—learning from the past. *World Hosp Health Serv*. 1997;33(2):22-27.
2. Gilbert HA. Florence Nightingale's environmental theory and its influence on contemporary infection control. *Collegian*. 2020;27(6):626-633.
3. Environment of Care Management Plan—annual evaluation. Joint Commission. April 11, 2016. Updated May 9, 2023. Accessed December 19, 2023. <https://www.jointcommission.org/standards/standard-faqs/hospital-and-hospital-clinics/environment-of-care-ec/000001284/>
4. Lawson B, Phiri M. Hospital design. Room for improvement. *Health Serv J*. 2000;110(5688):24-26.

5. Jamshidi S, Parker JS, Hashemi S. The effects of environmental factors on the patient outcomes in hospital environments: a review of literature. *Front Archit Res.* 2020;9(2):249-263.
6. Laursen J, Danielsen A, Rosenberg J. Effects of environmental design on patient outcome: a systematic review. *HERD.* 2014;7(4):108-119.
7. Nanda U, Eisen S, Zadeh RS, Owen D. Effect of visual art on patient anxiety and agitation in a mental health facility and implications for the business case. *J Psychiatr Ment Health Nurs.* 2011;18(5):386-393.
8. McLaughlan R. Psychosocially supportive design: the case for greater attention to social space within the pediatric hospital. *HERD.* 2018;11(2):151-162.
9. Jayakaran TG, Rekha CV, Annamalai S, Baghkomeh PN, Sharmin DD. Preferences and choices of a child concerning the environment in a pediatric dental operator. *Dent Res J (Isfahan).* 2017;14(3):183-187.
10. Pyrke RJL, McKinnon MC, McNeely HE, Ahern C, Langstaff KL, Bieling PJ. Evidence-based design features improve sleep quality among psychiatric inpatients. *HERD.* 2017;10(5):52-63.
11. Park SH, Mattson RH. Ornamental indoor plants in hospital rooms enhanced health outcomes of patients recovering from surgery. *J Altern Complement Med.* 2009;15(9):975-980.
12. Ulrich RS. View through a window may influence recovery from surgery. *Science.* 1984;224(4647):420-421.
13. Beauchemin KM, Hays P. Dying in the dark: sunshine, gender and outcomes in myocardial infarction. *J R Soc Med.* 1998;91(7):352-354.
14. Benedetti F, Colombo C, Barbini B, Campori E, Smeraldi E. Morning sunlight reduces length of hospitalization in bipolar depression. *J Affect Disord.* 2001;62(3):221-223.
15. Becker F, Parsons KS. Hospital facilities and the role of evidence-based design. *J Facil Manage.* 2007;5(4):263-274.
16. Ulrich RS, Zimring C, Zhu X, et al. A review of the research literature on evidence-based healthcare design. *HERD.* 2008;1(3):61-125.
17. Alfonsi E, Capolongo S, Buffoli M. Evidence based design and healthcare: an unconventional approach to hospital design. *Ann Ig.* 2014;26(2):137-143.
18. Fowler E, MacRae S, Stern A, et al. The built environment as a component of quality care: understanding and including the patient's perspective. *Jt Comm J Qual Improv.* 1999;25(7):352-362.
19. DuBose J, MacAllister L, Hadi K, Sakallaris B. Exploring the concept of healing spaces. *HERD.* 2018;11(1):43-56.
20. Giffin S. Hospital construction costs increase. *Health Facil Manage Mag.* January 28, 2024. Accessed June 17, 2024.  
<https://www.hfmmagazine.com/articles/4905-hospital-construction-costs-increase>
21. Brambilla A, Rebecchi A, Capolongo S. Evidence based hospital design. A literature review of the recent publications about the EBD impact of built environment on hospital occupants' and organizational outcomes. *Ann Ig.* 2019;31(2):165-180.
22. Crowley R, Atiq O, Hilden D; Health and Public Policy Committee of the American College of Physicians. Financial profit in medicine: a position paper from the American College of Physicians. *Ann Intern Med.* 2021;174(10):1447-1449.
23. Centers for Medicare and Medicaid Services. Hospice, end of life and/or palliative care critical element pathway. US Department of Health and Human

Services; 2015. Accessed December 30, 2023.

<https://www.cms.gov/files/document/cms-20073-hospice-end-lifepdf>

24. Alliman J, Bauer K, Williams T. Freestanding birth centers: an evidence-based option for birth. *J Perinat Educ*. 2022;31(1):8-13.
25. Goldkuhl L, Gyllensten H, Begley C, et al. Impact of birthing room design on maternal childbirth experience: results from the Room4Birth randomized trial. *HERD*. 2023;16(1):200-218.
26. Palmer RM. The acute care for elders unit model of care. *Geriatrics (Basel)*. 2018;3(3):59.
27. Geriatric Surgery Verification Quality Improvement Program. *Optimal Resources for Geriatric Surgery—2019 Standards*. American College of Surgeons; 2019. Accessed June 20, 2024.  
[https://www.facs.org/media/u4jf5j3k/geriatricsv\\_standards.pdf](https://www.facs.org/media/u4jf5j3k/geriatricsv_standards.pdf)

**Grayson Holt, MSW, MA** is an incoming medical student at Harvard Medical School in Boston, Massachusetts. Before medical school, Grayson was a Mandel Leadership Fellow at Case Western Reserve University, where he received master of social work and master of arts in bioethics and health humanities degrees. His research interests include hospital architecture, addressing violent and aggressive behavior in psychiatric settings, and promoting health equity.

**Johanna Glaser, MD** is a hospitalist in the Hematology, Blood and Marrow Transplant, and Cellular Therapy Program at the University of California, San Francisco (UCSF). She completed residency in internal medicine at UCSF through the primary care and health equities track and is currently pursuing a fellowship in hospice and palliative medicine at Stanford Medicine. Her professional interests include hospice and palliative medicine, spiritual care, health equity, and cancer immunotherapy.

**Editor's Note**

The case to which this commentary is a response was developed by the editorial staff.

**Citation**

*AMA J Ethics.* 2024;26(11):E828-834.

**DOI**

10.1001/amajethics.2024.828.

**Conflict of Interest Disclosure**

Authors disclosed no conflicts of interest.

*The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental. The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.*