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## FROM THE EDITOR

**How Design Affects Health** 

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Can you heal in the same environment in which you got sick? Regardless of the answer, the question is based on an underlying awareness that health is affected by the built environment. Health care settings, where much of the action intended to cure or heal occurs, are no exception. It was shown 40 years ago that views of nature decrease postsurgical patients' pain medication use and length of stay.¹ Similarly, high-visibility intensive care unit plans promise to improve patient care.² High lighting, minimized noise, and acuity-adaptable rooms reduce medical error.³

Design of health care spaces matters for everyone involved in healing, caregiving, and improving health. Design interventions are increasingly used in efforts to improve patient, clinician, and community health in noninvasive, nonpharmacologic ways. Dementia villages like the Hogeweyk in the Netherlands are designed to be friendlier environments for people with dementia than institutional settings because they include places like stores, parks, and cafes. By designing for community instead of only focusing on safety, the hope is to reduce patient agitation and improve overall well-being. Green spaces, such as community gardens, have been promoted as one way to enhance the physical and mental health of health care workers as well as patients.

Decades of this work have coalesced into a field known as evidence-based design, which uses scientific research to design and build spaces for best outcomes. It applies to the field of design a process of inquiry, research, and evaluation similar to that typically used in medical interventions. This month's issue of the *AMA Journal of Ethics* explores questions that arise when evidence-based design is applied to health care. The articles, podcasts, and visuals trace the history of the field as a story, linger on dementia care environments and their ethical questions, and propose tensions that the field must reconcile to move forward.

Along the way, contributors ask questions such as the following: What should every health profession trainee know about how the built environment influences health? Who should decide whether needs are met in hospital design, particularly when certain groups of people have been excluded from that process in the past? What are the implications of hostile architecture in health care spaces? Ultimately, evidence-based design raises questions about architectural and design standards of care for health care spaces. As occupants of those spaces, whether as patients, caregivers, or health workers, all of us are ultimately affected by design decisions.

#### References

- 1. Ulrich RS. View through a window may influence recovery from surgery. *Science*. 1984;224(4647):420-421.
- 2. York G. Improved patient care at a glance. *Patient Safety and Quality Healthcare*. January/February 2006. Accessed December 12, 2023. https://www.psqh.com/janfeb06/visibility.html
- 3. 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.
- 4. Renault M. 99% *Invisible*. Episode 557: Model village. October 24, 2023. Accessed December 12, 2023. <a href="https://99percentinvisible.org/episode/model-village/">https://99percentinvisible.org/episode/model-village/</a>
- 5. Using green spaces to support local health. NHS Providers. Accessed December 12, 2023. https://nhsproviders.org/being-an-anchor-institution/using-green-spaces-to-support-local-health
- 6. About EBD. Center for Health Design. Accessed December 12, 2023. https://www.healthdesign.org/certification-outreach/edac/about-ebd

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