



## Next-Generation Hospital Design Can Improve Health -- And Save Money



Extra large private hospital rooms with plenty of natural light and artwork may seem like unaffordable luxuries, but new research shows that these and other architecture and design features can improve patient care and in the long run reduce healthcare expenses.

They are among the elements of the "Fable hospital," an ideal healthcare facility as conceived and analysed by leaders in healthcare and design. Elements of the Fable hospital are being adopted on the ground today, with the imperative to improve quality and value. A set of articles in the Hastings Centre Report examines the state of the evidence for these design features, looks inside two hospitals that put some of these innovations into practice, and considers how design fits into the moral mission of healthcare.

"Fable Hospital 2.0: The Business Case for Building Better Healthcare Facilities." The lead article gives a thorough analysis of research that shows that specific design innovations can yield enormous benefits, such as reducing healthcare-related infections in patients and occupational injuries to nurses, as well as cutting energy use. These benefits, in turn, reduce costs, leading to a return on investment within three years, write the authors, who are leaders in healthcare management and design. The lead author is Blair Sadler, a senior fellow at the Institute for Healthcare Improvement and past president and CEO of Rady Children's Hospital, San Diego. He is co-author of *Transforming the Healthcare Experience through the Arts* and is a fellow and board member of The Hastings Centre. "Case Study: Dublin Methodist Hospital." Cheryl Herbert, president, supervised the construction of this new hospital in Ohio, which features all private rooms, abundant natural light, and noise-reducing materials. Among the positive outcomes were a low rate of healthcare-acquired infections and patient falls with injury. "We calculated that the evidence-based design elements we incorporated were 2.5 percent of the total project cost of \$150 million," she writes. "Our results tell us it was worth it."

"Case Study: Sacred Heart Medical Centre." The plan to incorporate evidence-based design features such as "soothing impressionistic art" and views of the natural landscape into Sacred Heart Medical Centre in Oregon initially met resistance, writes Alan Yordy, president and chief mission officer of PeaceHealth, the parent organisation. "A few community members were skeptical that this was anything more than a justification for building an expensive 'Hospital Hilton.'" But the new facility has demonstrated several benefits over the one it replaced, including reduced lengths of stay and costs of discharge. "Values Engineering: The Ethics of Design in Community Health Centres." Federally funded community health centres, which serve the neediest patients, are incorporating evidence-based design to support the ethics of expanding access to healthcare, write Benjamin Boltin, a consultant specialising in the design, construction, and operation of federally qualified health centres, and Nancy Berlinger, a research scholar at The Hastings Centre. Among the examples they cite is a mobile health van that brings health services to migrant workers in across northwestern New Jersey. The van is "green," operating on biodiesel and including a solar array to minimise the environmental impact.

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