**SmithGroup Forecasts Trends for the 2020s in Design & Health Care**

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DETROIT, January 6, 2019 – SmithGroup one of the nation’s leading integrated design firms, has tapped its broad network of 1,300 interdisciplinary design professionals to offer its predictions for the trends and challenges that the design industry will face in the decade ahead. A firmwide discussion has yielded major disruptors that are likely to impact design of health care environments in the 2020s.

**Adapting to the Climate Crisis**

“In the last couple of years, the impacts of climate change are increasingly viewed as a global crisis, and I believe the next decade will be defined by our response to this emergency,” says San Diego-based architectural designer Annie Chiang. The impacts of this ongoing crisis will continue to stress infrastructure of essential buildings and systems. “Health care organizations will look to the design and construction industry to create and deliver high-performing, resilient hospitals on tight budgets,” predicts Jessica Miller, a mechanical engineer in the Boston office. National standards including Facility Guidelines Institute (FGI) and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), as well as state and local regulations, like the new California Building Code, will continue to challenge hospitals to become more energy efficient.

Disasters and extreme weather will continue to expose the failure of buildings to adapt to the changing environment. “We will analyze and anticipate the specific risks posed in each locality, looking beyond historical data to predict future impacts, and design for the demands those threats create on the building systems of health care spaces,” says [Tyler Krehlik](https://www.smithgroup.com/people/tyler-krehlik), an architect in San Francisco.

Health care environments will be designed with ever-greater flexibility to allow for quick adaptations to the roller-coaster of impacts caused by the climate emergency—whether it be spikes in emergency care following extreme weather incidents, or care for lingering stressors like poor air quality or inadequate food supply. Designing for redundancy in building operations and critical patient services will be a minimum standard to ensure hospitals and clinics can provide uninterrupted care after a catastrophe.

**Making Health More Equitable**

Access to health and wellness services is a vital part of any conversation about community resilience, leading to a future where a hospital becomes an anchor within its community and personal health care is just one of many services offered to citizens. “Health systems will seek to enhance holistic wellbeing in the community, making investments beyond required healthcare benefits like supporting increases in public greenspaces or trails, or creating programs in high schools to prepare students for future careers in health care,” says [Johnny Wong](https://www.smithgroup.com/people/johnny-wong), an architect in San Francisco.

Health systems will use the power of big data, collected responsibly in a non-biased manner, to shape healthy behaviors and lifestyles in their communities, identifying particularly at-risk populations as well as needs and priorities in the local population. This will help organizations pinpoint and provide culturally-sensitive care across a variety of diverse communities, lend a more holistic view for providers of patients’ lives and needs, and change care practices to be inclusive.

Design professionals will benefit from this shift, moving away from being observers of communities to engaging communities in creating solutions together. Further, designers will think beyond project boundaries adopting non-traditional roles and methodologies to focus on population-health models as the ideal future state of health delivery, rather than the more common fee-for-service or value-based care. “Design can help drive a future of building healthier communities where equitable access to care helps everyone to thrive,” predicts Chicago architect [Karthik Ramadurai](https://www.smithgroup.com/people/karthik-ramadurai).

**Considering the Consumer**

For some time, health care providers have predicted that the “consumerism” phenomenon would transform the industry. While there have been mixed results to-date in the shift to a consumer-driven model, this trend is expected to gain momentum in the next decade as providers are further challenged by comparisons to other industries where the consumer is in control of their experience.

Patients will continue to be influenced by the ease of online shopping, voice assistants and mobile banking, thus shaping expectations of how they should be able to schedule appointments, communicate with their caregivers and order medications. Health practice director [Wayne Barger](https://www.smithgroup.com/people/wayne-barger) suggests that “to achieve a more customer-focused experience, designers should continue to focus on access and convenience while challenging long-held assumptions about spaces dedicated to waiting, admitting and registration.”

Hospital design will continue to be influenced by the hospitality industry as patients—and their families—expect inpatient hospital stays to mimic the high-end experiences of hotels, resorts and spas. The shift to private rooms will continue, but the trend will expand to include a re-examination of the entire experience beyond the patient room. Demand for accommodations for family members staying with patients may give rise to separate bathrooms or sleep spaces away from the patient room, for example.

**Health and Wellness of Healthcare’s Workforce**

Today employee burnout in healthcare is an epidemic—according to the Mayo Clinic more than 40% of physicians report symptoms of burnout, while 70% of nurses reported to CareerBuilder they feel similarly stressed. In the next decade, it is expected the healthcare workforce will continue to be taxed. It will become increasingly common for design professionals not just to create spaces that enable healthcare providers to perform their work efficiently and effectively, but to strategically incorporate respite areas that help caregivers to decompress from the stress of their work.

“We will be designing more spaces where care teams can meet and collaborate effectively,” predicts [Ann Kenyon](https://www.smithgroup.com/people/ann-kenyon), health studio leader in Detroit. Team-based care will continue to improve patient outcomes, but also reinforce positive mindsets and engaging working environments for healthcare professionals.

Health systems will take cues from corporate office amenities, integrating facilities intended to improve their employees’ health and wellness while at work. “We’ll see more exercise facilities, healthy meal service, outdoor exercise options and garden spaces, social spaces to connect with colleagues and spaces for respite and relaxation in order to attract and retain top talent,” expects Kendra Kettelhut, an interior designer in Los Angeles. Health employers will emphasize that keeping their workforce healthy will translate to better outcomes for patients.

**Advancing Virtual Care**

Personal technologies, particularly wearables, are pushing the care of health and wellbeing into people’s conscious thinking throughout each day—tracking eating, movement, sleep and more. In the next decade these technologies will create robust virtual care environments that will be accessible nearly anywhere, bringing care far closer to the patient. Workspaces for healthcare providers will adapt to add greater diversity in space types—virtual consulting will require private, tech-connected spaces, for example.

In the next decade, wearable sensors will tell patients when to seek medical attention, schedule appointments, even direct the safest transportation routes when going to a clinic or hospital. “As the advancements in personal technologies continue to accelerate and become ever-more woven into day-to-day life, expectations for technologically-connected and intuitive medical facilities will rise,” says Washington, DC health studio leader [Cindy Beckham](https://www.smithgroup.com/people/cindy-beckham). Health systems may struggle to catch up to the rapid pace given the average vintage of facilities pre-dates such technologies but can gain ground by becoming more connected and intuitive, and creating greater convenience and accessibility for patients.

Integrated technologies will provide patients with more control in their clinical experiences, helping to give them a more proactive role in their own care. This could include systems that allow patients to room themselves, access their test results in real time, and converse with specialists at their convenience.

**Acceleration in AI & Robotics**

The impact of artificial intelligence and robotics on health care is anticipated to accelerate in the next decade. AI will enable quicker, more accurate detection and diagnosis of disease, and machine learning will make it possible to better analyze treatment patterns, identify other similar cases to generate new research possibilities, or help manage chronic health issues for individuals.

Repetitive, routine tasks like check-in, charting, referrals, confirming medications and filling prescriptions, will be performed by automated tools, potentially relieving some strain on healthcare professionals. Personal wearables will make it possible to record patient vitals without a nurse, potentially streamlining space needed for such a task in a typical care setting.

AI will also help health systems better manage operations, including supply chains and staffing. As with other building types, AI is creating more responsive facilities with optimized building systems to help eliminate wasted energy and water.

Robotics may even make their way inside patients in the next decade, with advancements in robotic organs. “Treating bionic humans will demand an evolvement in the physical and virtual care environments,” predicts architectural designer Holly Harris in the firm’s Chicago office.

**Genomics Influence on Primary Care and Precision Prevention**

The next decade will continue to see advances in precision medicine and genomics, leading to more personalized treatment for acute diagnoses of conditions like cancer. “The physician’s new partner will be the genetic counselor, and together they’ll be able to predict hundreds of possible diseases or conditions from a single blood test,” suggests San Francisco-based medical planner [Vince Avallone](https://www.smithgroup.com/people/vince-avallone). “This blood test will become as common as our annual physical.”

Through simple testing, clinicians and patients will benefit from understanding predispositions for diseases like diabetes, heart or liver disease, allowing patient and doctor to create improved wellness programs, and better-timed screenings and diagnostics. These advances will result in fewer incidents of acute care in the hospital setting and potentially less outpatient treatment, thus shifting even more focus to preventative care and wellness.

As precision medicine and genomics become more common in the 2020s, health teams will change shape becoming a team of data analysts, interpreting patients’ personal testing results as continued research unveils new biomarkers for disease. “It’s possible that in ten years we’ll have our primary care visits from home, reviewing our health statistics on a personal dashboard and communicating with our care team to keep ourselves healthier longer,” says Harris.

As the oldest continually operating architecture and engineering firm in the country, SmithGroup has been a part of many changes in the world of design, so they are uniquely positioned to anticipate what the future decade will bring. In addition to these anticipated impacts on the design of health care environments, the firm has outlined future trends driven by [climate](https://www.smithgroup.com/perspectives/2019/the-decade-ahead-design-climate-in-2020-and-beyond), [cities](https://www.smithgroup.com/perspectives/2019/the-decade-ahead-design-cities-in-2020-and-beyond), [technology](https://www.smithgroup.com/perspectives/2019/the-decade-ahead-design-technology-in-2020-and-beyond) and [social change](https://www.smithgroup.com/perspectives/2019/the-decade-ahead-design-social-change-in-2020-and-beyond). More information on those topics can be found at https://www.smithgroup.com/the-decade-ahead-design-in-2020-and-beyond

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