

## ***From Stress Reduction to Conversation Starters: Infusing the Visual Arts into Healthcare Settings***

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Art, while decorative, is more than simply a backdrop for medical environments. It is a path towards truly holistic healing and an integral part of our hospital experience. Art can touch us deeply and can offer escape and respite from the anxiety often associated with clinical settings and the procedures that happen there. It is one of the many tools that Arts in Health professionals can use to reduce stress, offer diversions, and create conversational experiences at hospitals and clinics alike. Patients and families at the hospital are a captive audience, and because of that, unlike much of the art that you see in museums and in art galleries, art in a hospital setting has a specific job to do. It is not there to challenge the viewer, but rather to build emotional resilience for the patients, families, and staff who occupy the space.

Thanks to numerous studies dating back to the 1980s, healthcare design professionals are now better equipped to integrate the arts into hospital settings and demonstrate its impact. Most recently, in 2019, the World Health Organization published a white paper asking the question: “What is the evidence on the role of the arts in improving health and well-being in the WHO European Region?”<sup>1</sup> They looked at all different kinds of artistic interventions in healthcare, including visual arts, design, craft, literature, culture, performing arts, online, digital, and electronic arts. The findings strongly demonstrated that regardless of the art type, artworks all include certain components that improve mental and physical health and well-being. Take for example an artwork with “seek n’ find” elements. The “Where’s Waldo?” hunt can promote cognitive stimulation and social interaction between viewers. Engaging with sculptures can increase physical activity and sensory activation beyond the simple act of looking. When curating a hospital collection, selecting a variety of artwork modes and media will ensure that you maximize the possible benefits for your clientele.

Building an art program in a hospital is different than evaluating it, and because of that, the psychological, physiological, social, and behavioral responses to art often go un-quantified. However, thanks to evidence-based studies like the WHO report, the field of Arts in Health is now being taken seriously all around the globe. In the United States, the National Organization for Arts in Health (also known as NOAH) is actively working to professionalize the field. They offer numerous resources, including a newly published Code of Ethics, encouraging professionals working in both community and healthcare settings to consider the importance of arts engagement. While Arts in Health professionals are committed to creating healthful, art-filled environments for patients, the type of art selected varies widely.

Art in a healthcare environment is not “one size fits all” despite a desire in design discourse to create strict guidelines. Leaders in the field remain polarized on the question of whether artworks should be strictly figurative—meaning realistically rendered—or non-figurative / abstract. For many years, there was an uncontested preference for figurative art among hospital curators. This is supported by a theory

known as “emotional congruence” which asserts that patients will interpret ambiguous art through a lens of anxiety.<sup>ii</sup> Patients claim to generally experience uneasiness or feelings of vulnerability when visiting the hospital. In turn, when looking at art, they reflect their own stress back onto the artwork, unless they are reacting to an overwhelmingly positive image that requires no interpretation.

The preference for figurative art over abstract art was recently challenged by researcher Stine Maria Louring Nielsen and Professor Michael Finbarr Mullins of the Aalborg University in Denmark.<sup>iii</sup> It is important to note that their study had a small sample size of 100 patients, but interestingly, while confirming the positive effects of representational art, it also indicated that abstract art can inspire meditative self-reflection with positive effects on psychological well-being. To arrive at their conclusion, Nielsen and Mullins interviewed patients on how a room made them feel without art and then again after something was hung. No surprise, they found that the artwork did impact how people experience the space. If the art had a brighter, happier color palette, people tended to feel more positively about the room they were in. Regardless of the artwork subject, patients all enjoyed having an artwork in their room and being able to discuss it with someone else.

An interesting artistic experience back in the 1990s, with a much larger sample size, supports the figurative versus non-figurative dichotomy. Russian-born artists Vitaly Komar and Alex Melamid attempted to uncover how the average American felt about art. They hired a marketing research firm—Marttila & Kiley, Inc.—to ask over 1,000 random Americans a series of pointed questions about their artistic preferences. Questions included:

- Do you prefer paintings with sharp angles or soft curves?
- Would you rather look at a painting with figures that are nude or fully clothed?
- Should the people in the painting be at leisure or working?
- Do you like smooth canvases or thick brushstrokes?

44% of respondents preferred the color blue. 49% liked landscapes with water features, such as a lake or river. 56% of Americans claimed to like paintings with historical figures in them. Only about a quarter of the people interviewed said that they would choose modern art when decorating their homes. 43% identified Norman Rockwell as their favorite artist, contrasting starkly with the 4% who chose Jackson Pollock.<sup>iv</sup>

Using the statistics gathered, the artists were able to paint the so-called “Most-Wanted” and “Least-Wanted” paintings. The most-wanted painting was a blue-heavy landscape showing George Washington and a group of children standing at the edge of a body of water, possibly the Hudson River. The least-wanted was an angular, thickly painted, abstract composition with strong reds, golds, and blacks. The results seemed to prove that the average American respondent has not developed a taste for abstract art. This may require more arts education than is afforded to most, resulting in the common concern that the contemporary art world is elitist.

It is possible, however, that in the 30 years since these households were polled, tastes have changed. There are several examples of hospitals building contemporary art collections successfully, such as the Cleveland Clinic with its museum-quality art collection. Touring their space shows a dedication to both the arts and patient care, and pieces like *Cleveland Soul* by Jaume Plensa are incredibly contemplative (figure 1).



Figure 1: Jaume Plensa, *Cleveland Soul*, river stone & stainless steel, 2007, in the Cleveland Clinic art collection.

Another common trend in hospital art is an attempt to capture the healing power of nature in an artwork. Robert Ulrich's seminal study from 1984 proved, all else being equal, that patients *with* a window looking out at nature had shorter post-operative stays, complained less, and needed fewer medication than patients *without* a window.<sup>v</sup> Following this study, most hospitals began to incorporate garden spaces into their architectural plans. Ulrich's research did not directly look at nature-inspired art, but if having access to nature heals, does art showing nature (landscapes and animals) also heal? The jury is out, but we do know that humans are known to exhibit something called "biophilia" – a innate inclination towards views of nature or images of nature.<sup>vi</sup>

A 2008 study published in the *Journal of Child Health Care* presented compelling evidence that representational nature-related art is most preferred among all age groups of children, with no significant difference by gender. The authors of this paper recognized that "understanding the types of

art that have stress-reducing effects on children in healthcare settings is important in improving their psychological and physiological well-being and may play a role in the healing process.”<sup>vii</sup> Contrary to assumptions that children prefer cartoon-like images, the surveyed pediatric patients most highly rated nature images with bright colors and wildlife.<sup>viii</sup>

Some hospitals, such as the Lucile Packard Children’s Hospital | Stanford, have assembled their collections with this viewpoint in mind. A gray wolf sculpture by Michael Green literally incorporates nature with live grass serving as the animal’s fur (figure 2). This unique sculpture is managed in tandem by the hospital’s art curator and horticultural staff. The hospital’s nature and animal theme works particularly well for its pediatric audience, as the average child is highly curious about wildlife and the world around them.



Figure 2: Michael Green, *Gray Wolf of Rocks*, glass reinforced concrete, polystyrene foam sheets, paint, plastic, rocks, and plants, in the Dunlevie Discovery Garden at Lucile Packard Children’s Hospital | Stanford.

Just as there is research showing both the pros and the cons of abstract art, there are also experts in the Arts in Health field who are pushing back on the supposed safeness of landscape paintings for all audiences. Dr. Judy Rollins of the Nova Institute for Health argues in her book *‘Purpose Built’ Art in Hospitals* that, for some, a landscape is not relaxing.<sup>ix</sup> A particular painted scene could be reminiscent of a war zone, or a field might remind an agricultural worker of labor rather than peaceful retreat. Including figures in the landscape for additional context can countereffect these negative interpretations, particularly if the people are clearly enjoying the natural environment in a leisurely fashion.



For artworks that include literal representations of people, it is also important to consider who is represented on the canvas and by whom. When selecting artists for commissions, it is easier to ensure that institutional DEIAB goals are met than when purchasing an already produced artwork from a gallery. For a commission, a curator or art committee can purposefully select an artist of color to authentically represent their community. They can also control the diversity represented on the canvas by explaining that the commission will be an iterative process with at least two different concepts built into the artwork fee. If something is missing from the first concept, simply ask for it to be included in round two.

While it can be harder to visually embody certain kinds of diversity, such as sexual orientation or neurodiversity, there are meaningful ways to make every audience feel included. In addition to race, age, and gender, incorporating an individual with Down syndrome or someone in a wheelchair can make a group more diverse and inclusive of individuals with disabilities. A rainbow color palette might be used as a subtle nod to the LGBTQ+ community. Curators, and the artists they commission, need to be creative and work together on an art program designed deliberately to make all patients and families feel welcomed.

Another final consideration for artworks in a medical environment is scale. Bigger *is* usually better. Murals in exam rooms have become very popular because they are naturally immersive and can transform an entire space, rather than simply decorate it. Murals can be extended even to the ceiling elements of a space, as artist Derek Brennan did in his piece *Through the Canopy* at MetroHealth (figure 3).



Figure 3: Derek Brennan, *Through the Canopy*, 2022, mural painted in a pediatric playroom at the Glick Center, MetroHealth.

Murals can also be a cost-effective solution for filling a long blank corridor with art. Clinicians anecdotally report that these murals are useful during rehabilitation, motivating the patient to take their first steps post-surgery. A patient's progress can be easily measured by marking 10-foot increments on the floor alongside the artwork. In this case, the impact is very tangible, demonstrating another way that art can impact patients during their healing journey. There have also been multiple scientific studies devoted to understanding the purely visual impact of murals on patients. Most notable, evidence from heart-rate recordings show noticeably less stress when patients are exposed to therapeutic murals, and murals designed for distraction result in significant decreases in reported pain and anxiety.<sup>x</sup>

When putting murals in procedure rooms, where infection control is heightened, an artwork can be scanned, digitally reproduced, and printed on a sturdy, wipeable material, such as Acrovyn. This material is then mapped to the room and installed around existing elements, medical equipment, and built-in cabinetry. The art becomes a new wall surface, like a heavy-duty wallpaper, eliminating the "white box" clinical feel. Granted, a strategically placed painted accent wall can also break up white space, but when choosing the color, interior designers should first consult contemporary color theory and consider color implications for different cultures.<sup>xi</sup>

Perhaps the biggest takeaway from the abundance of materials out there is that hospital art curators and consultants need to, above all, consider their audience and the purpose of the space they are visiting. Hanging photographs of babies in a NICU environment could be triggering to mothers worried that their little one might not make it. Images of water are known to be generally relaxing but if hung in a space where certain radiology procedures necessitating a full bladder are performed, it could be cruel.<sup>xii</sup> So, if an art committee is involved in the selection process, it is useful to focus the group with guiding questions related to the artworks' intent. Is it meant for wayfinding or to sooth a troubled patient? Is it meant to create dialogue, inspire, or distract patients and families? While it may go without saying, in some cases, a successfully placed artwork will serve more than one purpose.

In conclusion, selecting art for a healthcare setting is nuanced, including the type of art, subject matter, color scheme, and scale. Because art is highly subjective, and preferences do vary, guidelines cannot be rigid. However, art should be inspirational, help with stress-management, and serve as a conversation starter. It should not add anxiety or stress to an already stressful environment. As one of the many tools in our toolboxes to improve patient outcomes, it must be carefully curated, and equally considered, along with the medical equipment and safety standards required by hospital code. Nonetheless, it is difficult to get it wrong if approached sensitively and with the best of intentions. French neuroscientist and musician, Pierre Lemarquis, said it best when he explained: "You don't treat an illness, you treat a person...You need medicine that's purely scientific to address the illness, and medicine that's a little artistic to address the person, their humanity. The two are complementary. People need to dream. They need imagination."<sup>xiii</sup> This is a lofty sentiment but so true. Art fuels our brains to dream and imagine a better, healthier tomorrow.

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<sup>i</sup> Daisy Fancourt & Saoirse Finn, *Health Evidence Network Synthesis Report 67*, World Health Organization Regional Office for Europe, 2019, p. 1.

<sup>ii</sup> G. H. Bower, "Mood and Memory" in *American Psychology*, 36(2), 1981, p.129-148.

<sup>iii</sup> Stine L. Nielsen, Lars B. Fich, Kirsten K. Roessler & Michael F. Mullins, "How Do Patients Actually Experience and Use Art in Hospitals? The Significance of Interaction: Auser-Oriented Experimental Case Study," in *International Journal of Qualitative Studies on Health and Well-being*, 12:1, 2017, p. 1-9.

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- <sup>iv</sup> Benjamin Sutton, "This is America's Most Wanted Painting," from Artsy.net on November 5, 2018. <https://www.artsy.net/article/artsy-editorial-komar-melamid-americans-painting-thought-wanted>
- <sup>v</sup> R. Ulrich, "View through a Window May Influence Recovery from Surgery," in *Science* 4647, 1984, p. 420–442.
- <sup>vi</sup> E.O. Wilson, *Biophilia* (Cambridge, MA: Harvard University Press, 1984).
- <sup>vii</sup> S.L. Eisen, R.S. Ulrich, M.M. Shepley, J.W. Varni, and S. Sherman, "The Stress-Reducing Effects of Art in Pediatric Health Care: Art Preferences of Healthy Children and Hospitalized Children," in the *Journal of Child Health Care*, September 2008, 12(3), p.173-190.
- <sup>viii</sup> S. Eisen, *Artfully Designed Pediatric Environments*, in unpublished doctoral dissertation, Texas A & M University, 2005.
- <sup>ix</sup> J. H. Rollins, "Purpose-Built" *Art in Hospitals: Art with Intent* (Emerald Publishing, 2021). Handout from The Center for Health Design webinar presentation on September 30, 2021, p. 12.
- <sup>x</sup> A.C. Miller, L.C. Hickman, & G.K. LeMasters, "A Distraction Technique for Control of Burn Pain," *Journal of Burn Care Rehabilitation*, 13(5), 1992, p. 576–580.
- <sup>xi</sup> Sheila J. Bosch, Rosalyn Cama, Eve Edelstein, and Jain Malkin, *The Applications of Color in Healthcare Settings*, (The Center for Health Design, October 2012), p. 76-77.
- <sup>xii</sup> Kathy Hathorn and Upali Nanda, *A Guide to Evidence-Based Art* (The Center for Health Design, 2008), p. 11.
- <sup>xiii</sup> Pierre Lemarquis quoted in Devorah Lauter, "In an Astounding New Book, a Neuroscientist Reveals the Profound Real-World Benefits Art Has on Our Brains," from *Art News*, March 2, 2021. <https://news.artnet.com/art-world/art-that-heals-science-1945970#:~:text=Science%20%26%20Technology-,In%20an%20Astounding%20New%20Book%2C%20a%20Neuroscientist%20Reveals%20the%20Profound,medicine%20that's%20a%20little%20artistic.%22&text=What%20can%20art%20do%20to,question%20becomes%20even%20more%20urgent.>