

Creative Minds In Medicine

A Cleveland Creative Intersection



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contents

foreword4
executive summary5
case study: Cleveland Clinic Arts and Medicine Institute11
the intersection of arts and health15
arts integration in healthcare environments
case study: Hospice of the Western Reserve25
participatory arts and health29
case study: Art Therapy Studio37
arts and health integration with community development, public health and human services41
case study: Cleveland Museum of Natural History 49
medical training and medical humanities53
case study: Devising Healthy Communities59
best practices for arts and health programs63
recommendations for future policy64
conclusion66
case study: Billy Bear's Honey Chase67
end notes71
acknowledgements82
appendix A: list of organizations referenced in Creative Minds in Medicine85
about CPAC86
supporters87

foreword

DNA is the building block of our lives. While common to every individual, DNA at the same time is what gives the world its striking diversity. Similarly, our communities too have their own form of DNA – sectors like arts and culture, technology, manufacturing and finance. Yet, it is the unique combinations of these sectors that give a place its distinct character and asset base.

Since its founding, the Community Partnership for Arts and Culture (CPAC) has advocated for the recognition and value of cross-sector partnerships between arts and culture and other community building sectors. Over time, CPAC has worked to build relationships and identify new opportunities for enterprises between Cuyahoga County's diverse group of artists and arts and culture organizations with leaders from other sectors such as business, community development and education.

This white paper represents the next iteration of CPAC's cross-sector efforts. *Creative Minds in Medicine* explores the intersections¹ that are taking place between the arts and culture and health and human services sectors. The publication reveals how these resourceful collaborations are improving health and wellness outcomes for the broader community as well as serving individual needs. The longstanding prominence of these sectors locally is a testament to their place in greater Cleveland's history and to their inseparability from our community's DNA.

Special appreciation goes to CPAC staff members Kristin Puch, director of research and advancement, and Nicholas Mathew, research fellow, for the outstanding work they achieved through the development of *Creative Minds in Medicine*. We trust you will find this research thought-provoking and illustrative. We believe you will have new insights and appreciation for the invaluable contributions produced when arts and health professionals join forces for our community now and in the future.

Thomas V. Chema, chair

Community Partnership for Arts and Culture

Thomas B. Schorgl, president and CEO Community Partnership for Arts and Culture

executive summary

The Intersection of Arts and Health in Cleveland

Cleveland is fortunate to be home to world-class sets of healthcare and cultural institutions. Both of these sectors were formed in response to the industrialization of Cleveland's economy, which grew rapidly during the 19th and 20th centuries, greatly increasing the area's urban population and financial resources. With those resources, wealthy industrialists funded the development and endowment of numerous cultural organizations, greatly improving quality of life for the growing numbers of Cleveland residents. At the same time, the expanding population demanded more medical personnel. The resulting growth of the local healthcare industry led to advances in medicine and the establishment of boards of health and other certification agencies which, in turn, promoted the creation of more health education resources. These assets, along with Cleveland's location on key transportation routes, helped the city's medical community grow into one of the most notable metropolitan healthcare sectors in the world. Meanwhile, Cleveland's arts and culture institutions have multiplied in number and discipline, expanded in size and reputation, and become renowned attractions for local and international audiences. While Cleveland is known for the strength of its arts and culture and health and human services sectors, the intersections of those sectors are still being explored and developed. This white paper examines the concept of such intersections first with a brief historical perspective on the development of the field. The organization of subsequent chapters is based on a number of examples of real-life programs and practices, both national and local, which illustrate the many ways in which arts and culture contribute to healthcare practice and human services delivery:

- Arts integration in healthcare environments. The infusion of arts and culture in, or the design of, settings where healthcare and medical treatment are given to individuals.
- Participatory arts and health. The engagement of individuals and communities in arts and culture activities and therapies for the promotion of broader clinical and general wellness outcomes
- Arts and health integration with community development, public health and human services. The ability of arts and culture to strengthen social ties and serve as a rallying point from which communities can address public health and social equity issues.
- Arts and culture in medical curricula. The enrichment of medical training programs through the integration of arts and culture.

The final sections of the paper introduce best practices and policy recommendations to further strengthen Cleveland's arts and health intersections in the future.

The Historical Development of the Arts and Health Field

Throughout history, doctors and medical personnel have provided care of patients and treatment of disease. They have worked to apply scientific methods in light of and sometimes in spite of the different cultural conditions of the period and location in which they work. The tension between the twin concerns of comfort and science has pulled prevailing medical and social thought first one way and then another over the years. This has occurred primarily as clinical approaches based in science, diagnosis of disease and observation have competed for favor with more humanistic approaches that emphasize individualized care, compassionate doctor/patient interactions and patient empowerment in healthcare decision-making. The patient-centric approach with its stronger connection to the social sciences has emerged more recently, following a period of stricter emphasis on disease-based, standardized treatment in the vein of natural sciences methodology. Over the past 50 years, greater acceptance of "whole person healthcare" practices, which consider each patient's unique needs, have created fertile ground for the application of arts and culture activities and expressive arts therapies in health and wellness. Over the course of the 20th century, professional psychologists and educators played an important role in integrating the arts with health more fully. And, from the mid-to late 20th century, greater institutional supports for the arts and health intersection began to develop, while today emphasis is being placed on the production of evidence-based research that demonstrates the multiple values of the intersection.

Arts Integration in Healthcare Environments

Healthcare facilities can range from small neighborhood clinics to huge hospital campuses. Whatever the type of facility, design considerations are typically focused on creating environments that welcome patients and their families, ease navigation to destinations and facilitate positive general wellness and therapeutic outcomes. Florence Nightingale, the founder of modern nursing, was one of the earliest practitioners of medicine that tied a patient's environment to his or her health results. In her *Notes on Nursing*, she pointed out that environmental factors including ventilation, temperature, light, sanitation and noise affect a patient's recovery and well-being. Discussions about healthcare environments have continued to include the roles of such factors, with growing emphasis placed on the specific parts that arts and culture can play from two key perspectives: the infusion of works of art and performances into healthcare spaces; and the specific role the design field plays in healthcare environments from structural, aesthetic and practical viewpoints. Over time, arts and culture have come to be valued for more than their decorative uses and are increasingly being integrated with healthcare environments for therapeutic ends.

With key partnerships developing between Cleveland's wealth of arts and culture organizations and its healthcare institutions, more visual artworks and performances are appearing in healthcare settings such as the Cleveland Clinic, MetroHealth and University Hospitals. Additionally, design considerations are directly influencing health and well-being with medical products shaped by organizations including Nottingham Spirk and Smartshape; biomedical art and game applications from students at the Cleveland Institute of Art; specially designed fashion from businesses such as Downs Designs; and architectural elements in facilities like the Hospice of the Western Reserve. Research has shown that arts integration in healthcare environments can yield lower levels of stress and the use of pain medication among patients; reduce medical errors and work-related injuries among staff; and yield cost reductions, lower rates of staff turnover, and enhanced public perceptions of healthcare institutions/facilities.

The inherent ability of arts and culture to connect, inspire and engage at both individual and community levels has direct implications for the roles it can play when intersecting with the health and human services field. For individuals undergoing medical treatment, participation in arts and culture activities has been shown to play an important role in boosting confidence, alleviating stress and improving clinical outcomes. Expressive arts therapists are trained healthcare professionals who apply the disciplines of visual art, music, dance, literature and theater to alleviate or treat specific diseases or disabilities for the health benefits of participants. For example, visual and literary arts help grieving children and adolescents express their emotions following loss; music therapy decreases pain, anxiety, depression, and shortness of breath, and it improves mood in palliative medicine patients; dance allows military veterans to tell their stories nonverbally and cope with post-traumatic stress disorder; writing and reciting poetry assists those with Alzheimer's disease and related dementia to recall memories; and drama therapy lifts mood and reduces pain levels for dialysis patients undergoing treatment. Expressive arts therapies have also yielded measurable outcomes such as stress reduction, pain management and improved motor and social functioning for groups such as military veterans, autistic youth and stroke survivors. As the role of arts in healthcare has shifted over time, from more aesthetic use to practical applications, individual artists have also become more involved in healthcare facilities. Artists are sharing projects and engaging others in their work through arts-by-the-bedside programs and as artists-in-residence. Arts-by-the-bedside programs bring customized performances directly to patients' bedsides. Artist-in-residence programs bring artists into healthcare settings in a more structured way for specified periods of time, allowing for the artist to become more integrated into the hospital environment and deepen relationships with those they serve. Whereas expressive arts therapies work toward treating the physical and psychological reactions associated with disease, the interaction of the artist with a patient or the interaction of the patient with a particular artistic medium are seen as ends in themselves.

Cleveland's healthcare institutions use a wide variety of expressive arts therapies to bring about positive clinical outcomes for patients, as do arts and culture organizations like Art Therapy Studio, Beck Center for the Arts and the Music Settlement. Cleveland's wealth of educational programs focused on the expressive arts therapies offered through sources like the Cleveland Music Therapy Consortium and Ursuline College, as well as the city's historic role in the development of the field, set it apart as an expressive arts therapy leader. In addition to expressive arts therapies, general arts and culture activities are also being used to empower individuals in the creation of artwork and are well-suited to meet the emotional, physical and social needs of specific groups like older adults through Judson, Malachi House, McGregor and Menorah Park. Collectively, Cleveland's expressive arts therapists and individual artists are key champions of promoting the role arts and culture have to play in the medical field's broader movement toward more patient-centered care.

Arts and Health Integration with Community Development, Public Health and Human Services

Within their communities, individuals participate in arts and culture activities as observers, creators, facilitators and supporters. Whether through formal or informal outlets, engagement in arts and culture has been shown to mediate greater civic engagement and efficacy among participants. Creative activities such as storytelling, community art projects and public design workshops can help involve stakeholders in decision-making processes and strengthen the

public's ties to community values. Such activities help strengthen social capital, dense networks between citizens, which has been shown to yield positive outcomes for physical and mental health. In addition to strengthening social ties, arts and culture activities can be rallying points from which communities can address public health issues, which include the prevention of disease through awareness campaigns and the coordination of activities such as vaccinations, motor-vehicle safety, workplace safety, infectious diseases management, nutritional education and prenatal care. Over time, the power of social forces to affect public health has been given more recognition in the field. As a result, arts and culture activities are increasingly being used to promote public health. Arts and culture activities can help engage audiences in public health issues, spurring discussion and action; provide opportunities to collect qualitative data directly from community members on public health issues; empower communities to change public health behaviors and environments; and encourage different groups to collaborate, effecting changes in attitudes and behaviors relating to public health. Folk arts, including such activities as quilting, storytelling, basket weaving and traditional dance, play an important role in communitybased arts practice because of their ability to reflect cultural heritage and values, involve new generations in meaningful experiences and unite groups. Public health research has increasingly focused on such outcomes because of the potential for social connectivity to reduce health inequities, disparities in health outcomes for different groups of people. Arts and culture practices are being used nationally and internationally to increase awareness, as well as mediate the effects, of such health inequities by making uncomfortable health topics more approachable, reaching specific population groups through customized programming, and utilizing less punitive measures to address community issues such as substance abuse, homelessness and violence.

Throughout Cleveland, specially designed arts and culture programs spark discussions on particular health topics and engage community participants of all kinds in activities that promote better and broader health and wellness outcomes. For children and teens, organizations like the Center for Arts-Inspired Learning, the Children's Museum of Cleveland, the Cleveland Museum of Natural History and the Great Lakes Science Center offer a range of health education programs. Other public health issues are being addressed such as homelessness through Cleveland Public Theatre's Y-Haven Theatre Project, health awareness through ideastream's "Be Well" series, and healthy eating and nutrition through the Cleveland Botanical Garden's Green Corps program. Dancing Wheels, SignStage Theatre and Verlezza Dance are raising awareness about disability and engaging individuals of all ability levels in artistic expression. Cleveland's arts and culture sector is a vital resource for drawing attention to pressing community health concerns like disease prevention, nutrition and exercise; providing opportunities for breaking stereotypes; and strengthening community ties.

Medical Training and Medical Humanities

Today, there is increasing support for more emphasis on patient-centered care and integration of interdisciplinary studies in medical programs called medical humanities. In the United States, the oldest medical humanities programs emerged in the 1960s and 1970s as a reaction to perceived shortcomings in the teaching, practice and evaluation of medicine. While clinical medicine undeniably provides the essential knowledge medical practitioners need to describe symptoms, diagnose illness and determine its causes and treatment options, it has limits in its ability to fully represent a patient's personal experience of living and coping with a disease. The field of medical humanities offers a way to reconcile knowledge with experience: It enhances the clinical training of physicians through the study of non-medical subjects such as those in the humanities, social sciences and arts and culture. Such interdisciplinary study gives medical students additional perspectives from which to reflect on their work and to use when interacting with patients.

Medical humanities courses offer opportunities to sustain empathy throughout medical training; enhance the cultural competencies of doctors when working with diverse populations; and foster self-reflection amongst doctors themselves. In many ways, arts and culture serve to enrich the practices of community healthcare professionals by strengthening their practical skills; raising their awareness of cultural issues; and introducing doctors to artists working in healthcare settings. Visual arts help medical students hone their observational skills through the careful examination of paintings. Technology enables artists to develop increasingly realistic models of organs such as the heart to supplement clinical training. Medical students learn patient-centered care by shadowing artists working with hospital patients, which enhances the students' understanding of the benefits that arts and artists can bring to healthcare settings, while also engaging doctors in the creation of arts and culture activities for their patients.

Cleveland has an opportunity to further promote partnerships between its arts and culture organizations and with the medical community to inform practices and encourage engagement by doctors in such activities. Through the arts, medical students can enhance their clinical practices such as observational skills through the Cleveland Museum of Art's "Art to Go" program; diagnostic skills in anatomy, pathology and physiology through the Cleveland Museum of Natural History's Hamann-Todd Osteological Collection; and interpersonal skills through improvisation workshops held by the Great Lakes Theater. The Cleveland Clinic Lerner College of Medicine's Program in Medical Humanities allows medical students to explore the ethical, societal and historical dimensions of their work through interdisciplinary subjects like the humanities, social sciences and arts and culture. Arts and culture activities can also help doctors build team cohesion, engender empathy, and increase tolerance for dealing with unexpected situations.

Best Practices for Arts and Health Programs

The following issues need to be highlighted when considering best practices for developing and implementing programs that bring together the arts and culture and the health and human services:

- Understanding context. All parties involved should understand the needs of the population being served, and the available resources for implementing arts and health programming.
- Funding the intersection. Funding can be helped by strategic alliances and better research.
- Addressing accessibility issues. Artists, patients, and healthcare providers all have various
 types of accessibility concerns that need to be addressed.
- Managing partnerships. Collaborations can help with the sharing of expertise and resources.
- Disseminating research. Research will help bolster the case for arts integration in health.
- Educating the public, healthcare professionals, and artists about the intersection. Education will strengthen and increase understanding of the benefits of the arts in health.
- Ensuring the safety of all participants. Privacy concerns, workplace safety regulations, and diversity are all issues that need to be considered in the arts and health intersection.

Recommendations for Future Policy

While Cleveland's legacy as an industrial city has left it with significant challenges, it is also responsible for giving the city key assets that are defining its future. The intersection of its arts and culture and health and human services sectors is driving innovative partnerships that are positively affecting the well-being of individuals, as well as the health of the broader place they call home. In order to foster the arts and health intersection, a number of policy issues merit consideration:

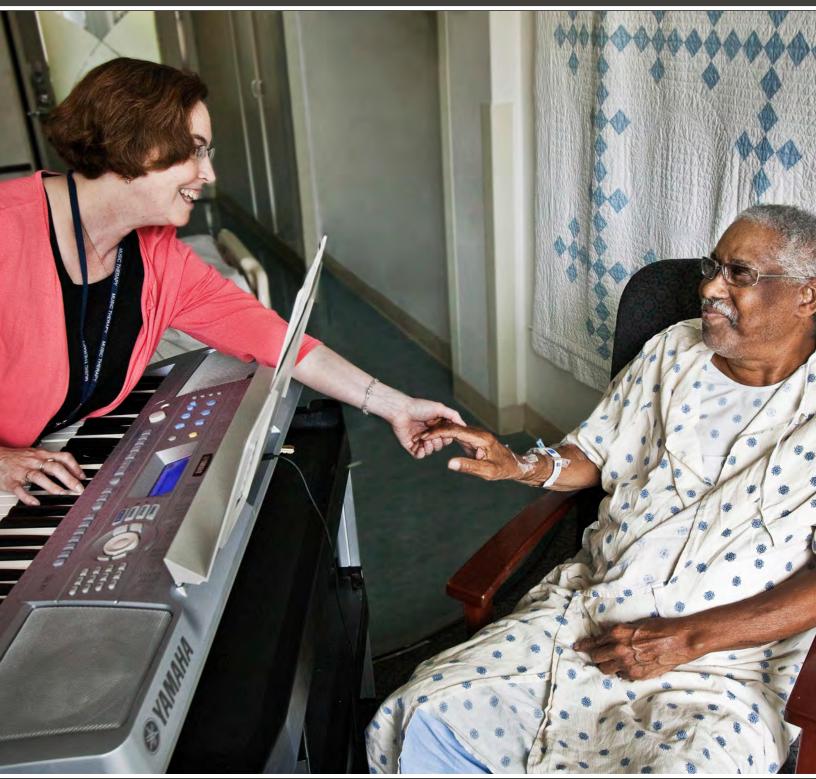
- Research. Continued research on the significance of the arts in health will be essential.
- Communications. To increase awareness, arts and health activities must be publicly promoted.
- **Networking opportunities**. Opportunities for arts and health practitioners to network, share research and discuss best practices must be organized.
- Funding. Funding should focus on supporting the full design, implementation and evaluation of arts and health programming. For art and music therapists, in particular, licensure issues will be important when it comes to funding.
- Educational opportunities. The development of local, formalized arts and health educational programs can help bolster expertise in the work of arts and health field.

By using these strategies to reinforce existing intersections, Cleveland has the ability to capitalize further on its wealth of arts and culture and health and human services assets. While Cleveland is already widely celebrated for the merits of these local sectors individually, it has a unique opportunity to become the undisputed leader of arts and health partnerships that exist at the place where creativity and well-being meet.

Creative Minds in Medicine

The ability of arts and culture to draw connections to a particular place, unite communities and mobilize individuals in support of common causes directly affects community health. Similarly, the ability of arts and culture to foster creativity, inspire reflection and draw out an individual's interpretation of his or her world directly influence personal health and well-being. Arts' and health's common impact on both the community and the individual is the clear point from which their intersection grows. The creative process ignites our passions, drives our perspectives of the world, and pushes us to challenge accepted conventions. In the end, the arts and health intersection is founded on the use of creativity to gain insights about what it is to be human — to experience life from birth to death. Today, arts and health programs continue to grow both in number and scope as they focus on promoting well-being and enhancing quality of life in the broadest sense for both individuals and communities.

case study cleveland clinic arts and medicine institute



At Cleveland Clinic, board-certified music therapists treat patients to improve symptoms and conditions associated with illness and injury. Music therapy has been shown to decrease pain and anxiety, and improve quality of life, mood, and speech. Photo by Kulas Foundation & Taxel Image Group, 2008

lifting the spirit

You expect to see and feel certain things when you go to the hospital: white coats; cold stethoscopes; hard, sterile, gleaming surfaces; worry. You don't generally expect to find musicians playing there or spaces filled with colorful art.

The surprise you get when you walk into the arts-filled Cleveland Clinic may be part of your treatment.

"It really can elevate the mood," says Iva Fattorini, MD, MSc, Chair, Global Arts and Medicine Institute at Cleveland Clinic.

The Arts and Medicine Institute was formed in 2008 to build on Cleveland Clinic's solid tradition of mixing art with health care, she says. Since its founding in 1921, Cleveland Clinic has been known for displays of fine art on its walls and of artistic talent from its employees. Its art collection contains more than 5,300 works.

With the Institute in place, arts of all kinds have become an official part of Cleveland Clinic's health mission and programming, explains Maria Jukic, executive director of Arts and Medicine. To the organization's original ends of featuring art in the medical facility so that patients' experiences there will be more pleasant, two more aims have been added: The Institute's purpose is also to engage in, and scientifically research, the use of arts in medical practice at the Clinic, especially art and music therapy, and to build community around arts, health, and medicine.

Those goals have allowed the Clinic's range of arts therapies and programs to expand and deepen: Jukic and her colleagues are making more art available on Clinic campuses, finding more ways of using it to heal, and identifying more people who need its good

effects.

91 % of patients reported visual art improved their mood...music made a difference to 94%

Illness and medical treatment, whether for the patient or loved one, create "a lot of uncertainty, a lot of time in your head hashing out what's going to happen," says Jukic. And few things take you out of yourself or cheer you up faster than an unexpected delight: "People are surprised when they walk in the building, hear the music, and see a live performer."

Seeing or hearing the art reduces anxiety, as does talking about it or making some yourself. Jukic calls it "normalizing," a process art can create that helps people feel more in control, less fearful. The bottom line? Art is good medicine.

And not just for patients. True, the sick remain the Clinic's central concern and patients are measurably benefiting from the presence of art and musicians – a 2012 Clinic survey found 91 percent of patients responding reported that visual art improved their mood during hospital stays of two to three days. Another survey discovered that music made a difference to 94 percent.

But pictures, concerts, and arts therapies also soothe the stressed-out families of the sick, refresh the Clinic's hardworking staff members, and engage and enlighten the public.

"We have always felt that art was there for everyone to enjoy," observes Joanne Cohen, executive director of Cleveland Clinic's Art Program, part of the Arts and Medicine Institute.

This is not luxury.

That program, which focuses on visual art, manages Cleveland Clinic's existing art collection, and adds to that collection by commissioning and acquiring new pieces. The Art Program presents a wide range of programs including exhibitions

and tours that are available to the public as well as to those working or recuperating inside Clinic buildings. Many of the programs and works of art have been subsidized by donations from grateful patients and visitors to Cleveland Clinic.

"It's a great service to be able to share the artwork in so many ways," Cohen says.

Committees of experts including curators select the pieces to be bought and/or displayed. The quality of the art selected must be high, says Cohen, because it needs to stand the test of time. Those who choose the art aim for eclectic media and subject matter, because Cleveland Clinic has a global reach, and staff and patients from all over the world. It wants to reflect those many different viewpoints, which is also "far more interesting and engaging to a diverse population" across Cleveland and other geographic areas, she adds.

Yet the something-for-everyone approach does contain one other qualification: Cleveland Clinic art needs to have something positive to say about the human condition

Jennifer Steinkamp's video installation, "Mike Kelley 1," 2007, evokes many reactions from patients, families and employees. Photo by Bellamy Printz

and spirit. Art that's collaborative and/ or environmentally conscious, art that calms, comforts, amuses or uplifts – these are the kinds of images and objects that contribute to healing.

This is something people need.

It makes sense that many of the pieces reflect nature or the outside world. Water, landscapes, sunlight — such subjects tend to mellow people's moods and brighten their outlooks. Cohen says that one of Cleveland Clinic's most successful pieces is a video by Jennifer Steinkamp of a tree that went through seasonal changes. Displayed in the cardiovascular

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building, it is "probably the most beloved piece at the Clinic," Cohen recalls. Benches had to be installed so people could sit in front of it. Others danced in front of it, and the wall had to be repainted frequently because so many viewers tried to touch and hug it.

Dr. Fattorini stresses, "This is not luxury. This is something people need." Medicine has been dehumanized as a result, in part, of technological advances, she notes. "I think it is a good time to remind ourselves that we are not just human bodies."

The arts help patients heal faster, she said, potentially reducing the length of their hospital stays. They can also help decrease the amount of staff turnover by making the workplace less stressful. So there are economic benefits to having an arts program – but the value of the Arts and Medicine Institute is much greater than that, Fattorini says. "It is emotional support. It comes from the heart, not the business plan."



Left: Art therapists facilitate the creation of art by patients to assist with the emotions, stress, and anxiety experienced in the hospital setting. Programs are offered bedside and in groups, for patients and families.

Photo by Cleveland Clinic Photography

Below: Docents lead tours of the Cleveland Clinic art collection several times per week. Patients suffering from memory loss and their caregivers enjoy a special tour program monthly.

Photo by Jim Lang



the intersection of arts and health

What is the Arts and Health Intersection?

Arts and culture can profoundly affect the well-being of those who experience it. From writing poetry or playing music with friends to taking photos or experiencing theater, arts and culture serve as outlets for individual learning, expression and creativity. Participation in arts and culture has been shown to yield positive cognitive, social and behavioral outcomes for human development and for overall quality of life throughout the human lifespan.²

In broader society, the direct and indirect benefits of engaging in arts and culture can improve community vibrancy, spur neighborhood revitalization and strengthen the economy. For the arts and culture sector, such outcomes have traditionally been discussed from two different, but not mutually exclusive, viewpoints: the more subjective, individual benefits of arts and culture; and the more practical community-wide benefits. Because of its ability to span both personal and public spheres in varying degrees, arts and culture participation can yield far-reaching results.³ For example, an artist's exploration of neighborhood challenges through painting can take place because of sheer enjoyment of the activity. At another level, the paintings can be developed into public murals that call attention to areas or issues in need of improvement. Even further, the paintings can become an exhibition that rallies the broader community, encouraging it to take actions that address neighborhood challenges. In this way, a multifaceted view of impact is critical to develop a full understanding of the ways in which arts and culture influence the human condition on a personal and global scale.

In a similar way, an inquiry into the nature of the arts and culture / health and human services intersection (referred to hereafter as the "arts and health" intersection, for simplicity)⁴ requires a multifaceted approach. "Arts and health" is the "generic term that embraces a range of arts practices occurring primarily in healthcare settings, which bring [sic] together the skills and priorities of both arts and health professionals." It also includes traditional cultural practices, as well as an understanding of subjects covered in humanities-oriented studies such as history, philosophy and the social sciences. In this general sense, the terms "arts" and "health" can be ambiguous because their definitions are dependent on the manner through which they intersect. Definitions are ultimately determined by who is participating in the arts and health intersection, where the intersection takes place and what the intersection's goals are. Because of these variables, the arts and health intersection is not confined to a narrow context, but instead spans artistic disciplines, encompasses creative expression in the broadest sense and serves to humanize healthcare settings for patients, visitors and healthcare providers alike. Clinical outcomes in physical and mental health, improved health and human services delivery and personal enjoyment of arts and culture all exist on the continuum of this creative intersection.

While, at first glance, the partnership between arts and health seems straightforward, it is important to recognize that the sectors differ in a number of key ways. Artistic practice commonly challenges convention, organically develops new methods and accepts subjective outcomes, while protocols for health practice and clinical outcome measurement demand greater rigidity. For this reason, the intersection of the two must be predicated on the formation of strong collaborations because "the practice of arts and health is not a single professional role but

a skills partnership of people who come together in their distinctive roles to engage the public in creative activities that aim to improve health and well-being." Creative interventions in arts and health typically run along a spectrum that, on the one end, involves arts and culture being produced "for" and, on the other, concerns arts and culture that are produced "with." More specifically, arts and culture can simply be made present in an environment for others to observe (i.e. background music, decorative art), made for a patient or group in response to the context (i.e. group performance, personalized pieces), or made with a patient through direct engagement (i.e. therapies, workshops, producing work together). In these ways, arts and culture have the ability to span multiple disciplines and be applied through a wide range of methods. This ability makes arts and culture interventions useful in responding to the unique needs and concerns of individuals that arise in multiple healthcare situations.

Arts and Health in Cleveland

Cleveland is fortunate to be home to world-class sets of healthcare and cultural institutions. Both of these sectors were formed in response to the industrialization of Cleveland's economy, which grew rapidly during the 19th and 20th centuries, greatly increasing the area's urban population and financial resources. With those resources, wealthy industrialists funded the development and endowment of numerous cultural organizations, greatly improving quality of life for the growing numbers of Cleveland residents. At the same time, those demanded more medical personnel. The resulting growth of the local healthcare industry led to advances in medicine and the establishment of boards of health and other certification agencies which, in turn, promoted the creation of more health education resources.

These assets, along with Cleveland's location on key transportation routes, helped the city's medical community grow into one of the most notable metropolitan healthcare sectors in the world. Today, its major medical institutions include the Cleveland Clinic, The MetroHealth System, Sisters of Charity Health System, Summa Health System, University Hospitals and the Louis Stokes Cleveland VA Medical Center, which form the base of a much broader regional network of health and human services providers. Meanwhile, Cleveland's arts and culture institutions have multiplied in number and discipline, expanded in size and reputation, and become renowned attractions for both local and international audiences.

The Framework of this White Paper

While Cleveland is known for the strength of its arts and culture and health and human services sectors, the intersections of those sectors are still being explored and developed. This white paper examines the concept of such intersections with a brief historical perspective on the development of the field. The organization of subsequent chapters is based on a number of examples of real-life programs and practices illustrating the many ways in which arts and culture contribute to healthcare practice and human services delivery: 11

- Arts integration in healthcare environments. The infusion of arts and culture in, or the design of, settings where healthcare and medical treatment are given to individuals.
- Participatory arts and health. The engagement of individuals and communities in arts and culture activities and therapies for the promotion of broader clinical and general wellness outcomes.

- Arts and health integration with community development, public health and human services. The ability of arts and culture to strengthen social ties and serve as a rallying point from which communities can address public health and social equity issues.
- Arts and culture in medical curricula. The enrichment of medical training programs through the integration of arts and culture.

In the following chapters, these categories will be defined more fully and will highlight key examples of arts and health collaborations that are happening in Cleveland. The final sections of this paper will introduce best practices and policy recommendations to further strengthen Cleveland's arts and health intersections in the future.

The Historical Development of the Arts and Health Field

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

-Hippocratic Oath, modern version, 1964¹²

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

-World Health Organization, 194813

Throughout history, doctors and medical personnel have provided both care of patients and treatment of disease. They have worked to apply scientific methods in light of and sometimes in spite of the cultural conditions of the period and location in which they work. ¹⁴ The tension between the twin concerns of comfort and science has pulled prevailing medical and social thought first one way and then another over the years as clinical approaches based in science, diagnosis of disease and observation have competed for favor with more humanistic approaches that emphasize individualized care, compassionate doctor/patient interactions and patient empowerment in healthcare decision-making. ¹⁵ The patient-centric approach with its stronger connection to the social sciences has emerged more recently, following a period of stricter emphasis on disease-based, standardized treatment in the vein of natural sciences methodology. ¹⁶ Over the past 50 years, greater acceptance of "whole person healthcare" practices, which consider each patient's unique needs, have created fertile ground for the application of arts and culture activities and expressive arts therapies in medical practice.

Expressive arts therapies have been recognized since ancient times for their utility as treatments for a host of ailments and both Aristotle and Plato wrote of the healing influence of music on behavior and health.¹⁷ For example, ancient Egyptians encouraged artistic practice for the treatment of mental illness, ancient Greeks used drama and theater for its therapeutic effects, and Italian philosophy promoted dance and play for enhancing early-childhood development. During the "moral therapy" or humane-treatment movement of the late 19th and early 20th centuries, art and music were incorporated into the treatment of mental illness.¹⁸ Such practices continued as the formal integration of arts and health progressed during the period of the first and second World Wars. During this time, the value of the visual arts in raising public awareness about infectious diseases gained greater prominence through the design of posters.¹⁹ Also, music therapy was first used for the clinical treatment of veterans and was touted with yielding "miracle cures."²⁰

In the 1940s, psychologist and educator E.Thayer Gaston professionalized the music therapy field with his research demonstrating the impact of music on health and supporting the development of educational programs.²¹ In 1950, the National Association for Music Therapy was founded and became one of the first expressive arts therapy organizations to codify its operations, set educational standards, and conduct and disseminate research.²²

The art therapy field began to emerge in the 1920s as expressive art was being used to treat mental illness at a number of American hospitals including New York State Psychiatric Hospital and St. Elizabeth's Hospital in Washington, D.C. During the Works Progress Administration's Federal Art Project, art teachers were hired to work with psychiatric patients. By the 1940s, the work of psychologists and educators Margaret Naumberg and Edith Kramer had built a foundation for the formal development of the art therapy field in the United States and acceptance of art as a vehicle of therapy grew with further advances in psychology, child development and sociology. These led in the 1970s to the art therapy field dividing into two approaches: The first views the process of art-making in and of itself as a therapeutic practice; the other, art psychotherapy, regards art-making as a way for patients to express their emotions symbolically and for therapists to interpret their patients' mental conditions.

From the mid- to late 20th century, other national associations for expressive arts therapy practices emerged, spanning multiple disciplines such as drama, dance, poetry and visual arts. The National Endowment for the Arts (NEA), created in 1965²⁶ to increase public access to art, echoed the decade's calls for greater inclusiveness through social rights movements by fostering an environment in which programs such as Hospital Audiences²⁷ and Very Special Arts (VSA)²⁸ could be created to bring arts experiences to culturally underserved groups. Hospital Audiences was a key contributor to the development of one of the first arts programs in a hospital, a performance series at Duke University Medical Center.²⁹ Very Special Arts ultimately became known as the Department of VSA under the auspices of the Kennedy Center and is today regarded as the international organization for arts and disability. In 1979 the National Coalition of Creative Arts Therapies Associations (NCCATA) was formed, and it is still in existence today. It is an alliance of professional creative arts therapies associations who are working together to further the use of the arts as therapeutic modalities while collaborating on education, research, and advocacy.³⁰

Through the 1970s, the proliferation of state arts councils and arts service organizations helped increase the attention given to community-based art and the creation of public art. Percentfor-art programs, which devote a set percent of a project's cost to support the incorporation of arts and culture, also helped jumpstart some early hospital art programs. Projects such as 1987's NAMES Project AIDS Memorial Quilt, have raised awareness about public health issues while other programs have directly brought together artists-in-residence with patients in hospital settings. Through the 1980s and 1990s, a greater emphasis was placed on the design of hospital spaces in order to create so-called healing environments for patients by infusing the facilities with arts and culture. Today, arts and health programs continue to grow both in number and scope as they focus on promoting well-being and enhancing quality of life in the broadest sense for both individuals and communities.

arts integration in healthcare environments

"Little as we know about the way in which we are affected by form, by colour, and light, we do know this, that they have an actual physical effect."

- Florence Nightingale, Notes on Nursing, 1860³⁵

arts integration in healthcare environments

Key Benefits

In patients, research has demonstrated arts and culture integration in healthcare facilities and patient-centered design elements yield:

- · Lower levels of stress
- Improved sleep patterns
- · Lower rates of secondary infections
- · Higher overall satisfaction levels
- Lower use of pain medications
- Reduced lengths of stay

Benefits have also been reported for healthcare staff as well:

- Improved communications with patients and other staff
- Less work-related injuries
- Reduction in medical errors
- Higher productivity
- Lower levels of stress
- Higher rates of job satisfaction

Such outcomes yield overall benefits for healthcare facilities/institutions as well:

- Cost reductions
- Lower rates of staff turnover
- Enhanced public image of facilities
- More positive experiences for patients and their caregivers

Overview

Healthcare facilities can range from small neighborhood clinics to huge hospital campuses. Whatever the type of facility, design considerations are typically focused on creating environments that welcome patients and their families, ease navigation to destinations and facilitate positive general wellness and therapeutic outcomes.³⁶ Florence Nightingale, the founder of modern nursing, was one of the earliest practitioners of medicine that tied a patient's environment to his or her health results. In her Notes on Nursing, she pointed out that environmental factors including ventilation, temperature, light, sanitation and noise affect a patient's recovery and well-being.³⁷ Discussions about healthcare environments have continued to include the roles of such factors, with growing emphasis placed on the specific parts that arts and culture can play.38

Throughout the 20th century, arts and culture were appreciated in healthcare environments primarily for their decorative value, rather than their therapeutic benefits. However, this view has shifted as the healthcare industry has focused greater attention on how facilities might create supportive or healing environments for patients. The industry increasingly recognizes that design helps to create spaces conducive to recovery by giving patients a degree of control over their environment, encouraging social interaction as a means of support, and providing them with access to nature and other positive "distractions." More recently, increased emphasis on evidence-based design⁴⁰ has allowed researchers to quantify the benefits of art in healthcare environments by tracking improved clinical outcomes; satisfaction among patients, families and medical staff; productivity; and economic outcomes for healthcare facilities.41 Such design "addresses the full human experience, the psychological, intellectual and physical response to a space and to the activities that occur in the space."42 Specifically, improved communications

between patients and staff, fewer work-related injuries and a reduction in medical mistakes are some of the benefits reported. Such outcomes yield faster recovery times for patients and increase staff efficiency, both of which yield cost savings for healthcare institutions. ⁴³ In the following sections, this chapter will explore the effects that arts and culture create in healthcare environments from two key viewpoints: the infusion of works of art and performances into healthcare spaces; and the specific role the design field plays in healthcare environments from structural, aesthetic and practical viewpoints.

Arts and Culture Infusion

Today, arts and culture appear in healthcare settings through art galleries, performance series, traveling exhibitions, sculpture gardens and murals, while inviting greater interaction and active engagement by observers. During its 2007 effort to quantify arts programs in healthcare facilities, the Global Alliance for Arts and Health, The Joint Commission, and Americans for the Arts reported that 45 percent of 1,807 healthcare facilities surveyed have arts programs in place to serve patients and staff, with permanent displays of art being most common.⁴⁴ Locally, the Cleveland Clinic Arts and Medicine Institute resulted from work that began in 1983 when the hospital formed an Aesthetics Committee to oversee art and design considerations in Cleveland Clinic facilities. Today, docents called Art Ambassadors showcase the Art Program by leading dialogues about contemporary art and artists with patients, visitors and staff.⁴⁵ Similarly, University Hospitals⁴⁶ created its Art Collection in 1988 to advance its mission "To Heal, To Teach, To Discover." It contains works in a range of media by both local and international artists. In addition, health system partnerships with local school districts have brought students' artwork into facilities such as Cleveland's MetroHealth Medical Center⁴⁷ and the Cleveland Clinic's Hillcrest Hospital in the greater Cleveland suburb of Mayfield Heights.⁴⁸

In addition to alleviating patient stress and humanizing the environment, visual art can also serve as a directional tool to help patients and families navigate their surroundings. For example, the Ann and Robert H. Lurie Children's Hospital of Chicago partnered with that city's cultural institutions and artists to thematically design each hospital floor using a specific animal image for wayfinding and to create positive distractions for children and families. Since tastes in art are so

individualized, the hospital does not put artworks in patient rooms, but instead provides cubbyholes in which patients may display personal objects brought from home.⁴⁹

In the Chicago case, wayfinding landmarks were intentionally planned as part of the building's design. However, wayfinding can also develop more organically. For example, while curators of the Cleveland Clinic's Art Program do intentionally use pieces for wayfinding, they have also discovered that certain pieces are unofficially used by patients, visitors and staff as wayfinding landmarks within its vast complex of buildings. For example, a photograph by Julie Moos called "Mrs. Huntley and Mrs. McKinstry" was placed by the Clinic's art curators near a set of elevator doors on its Main Campus and, over time, the image came to be used by patients, visitors and staff as a geographic reference point. Curators learned this when the collection was rotated: After the picture was removed questions from individuals about what had happened to the piece made it clear that people had been using the photo for navigation.

Over time, the image came to be used by patients, visitors and staff as a geographic reference point.

Arts Integration in Healthcare Environments

Performing arts are also being incorporated in healthcare settings. The Cleveland Clinic coordinates live performances within its campus through partnerships with local musicians and organizations such as the Cleveland Institute of Music, Roots of American Music, Dancing Wheels and GroundWorks DanceTheater. The national group Musicians on Call brings live music to patients through its Bedside Performance Program in six cities throughout the United States. To expand its reach it has a CD Pharmacy program that provides music libraries and disc players to care facilities nationwide. In Cleveland, Musicians on Call has provided CD pharmacies to a number of healthcare institutions, such as the Cleveland Clinic, who have in turn shared the libraries with music therapists for incorporation into their work, or created dedicated music libraries on site for direct use by patients or staff. The Cleveland Institute of Music also engages its students in performances at health facilities such as University Hospitals, the Cleveland Clinic, Judson Retirement Communities and the Hospice of the Western Reserve.

More frequently now, technology helps arts and culture serve their various functions more effectively by making them easier to integrate into facilities and programs. For example, healthcare organizations increasingly use digital displays to simplify the process of presenting works of visual art.⁵¹ Digital displays allow organizations to accept online submissions of work from a wide group of artists and free themselves from the insurance, delivery and storage liabilities for loaned artwork. ⁵² Teleconferencing is allowing digitally recorded or streamed performances to be made available to patients.⁵³ Locally, LogicJunction, Inc., uses interactive technologies to improve navigation in hospitals including the Cleveland Clinic and Lake Health's TriPoint Medical Center in Willoughby.⁵⁴

The Role of Design

Staff and patients alike benefit from built environments that deliver high-quality healthcare services efficiently. However, facilities have often in the past been "built around physicians' desires and workflows" only. ⁵⁵ This approach is changing as greater attention is being placed on patient engagement in health delivery, and design is increasingly viewed for its ability to "create environments that positively affect the healing process and well-being of patients." Qualities that affect healthcare environments range from permanent architectural features such as room sizes and layouts to changeable interior design elements such as colors and furnishings, and ambient conditions including noise and lighting levels. For example, the Hospice of the Western Reserve's facilities have been designed to give patients access to outdoor spaces and create a homelike environment. ⁵⁸

Healthcare settings that admit daylight, provide natural views, give patients more privacy and incorporate homelike furnishings have been shown to alleviate stress, help patients sleep better, lower rates of secondary infection, reduce length of stay, lower pain medication use and raise satisfaction levels. Patients not only reap benefits from the creation of such healing environments, as staff also have reported better communication levels, higher productivity and less turnover. For them, features such as the location and height of storage spaces can help reduce injuries, while in pharmacy and laboratory spaces, clear and easy access to medicine and equipment can increase staff effectiveness and reduce error. 60

At University Hospitals Seidman Cancer Center, light and access to natural features are given a prominent place in its design. For example, medical equipment used in the treatment of radiation therapy is often located on lower floors because of how heavy it is. Lower levels of the hospital do not have a great deal of natural light, so when the Seidman Cancer Center opened in 2011,

Arts Integration in Healthcare Environments

it included access to a healing garden for patients. The garden incorporates numerous types of artwork into its extensive plant collection. ⁶¹ Patient-centered design elements also were incorporated into its Ahuja Medical Center facility. ⁶²

Research in this field continues to garner interest and is being encouraged through programs such as the American Institute of Architects (AIA's) Arthur N. Tuttle Jr. Graduate Fellowship in Health Facility Planning and Design, which awards grants to young architects and graduate

students completing research in the field of hospital planning and the design of healthcare environments.⁶³ The AIA, AIA Foundation and the Association of Collegiate Schools of Architecture are also developing research and programming specific to design and health considerations.⁶⁴

Beyond the work of architects, landscape designers and interior designers, the design field is impacting healthcare in a number of additional ways. Through the work of industrial designers who help create medical devices, principles of shape, color and function

Downs Designs' clothing designers developed garments sensitive to the abilities of wearers.

are solving health problems. 65 More and more, the medical industry is inviting designers in, sometimes literally: In one case, the Cleveland Clinic's Global Cardiovascular Innovation Center made room on its premises in 2010 for a satellite office of the design firm Farm Product Development, which specializes in medical device design for cardiovascular applications. Graphic designers, too, are findings ways to more clearly visualize scientific information and humanize patients' healthcare experiences,66 as the American Greetings Properties Division did for the University Hospitals Rainbow Babies & Children's Hospital by creating a mascot for it called Bo the Take Care Bear. In addition to meeting with patients in person, Bo turns up in educational materials about the hospital's programs, making them friendlier and more relatable to young patients and their families.⁶⁷ Fashion designers are improving healthcare by, among other contributions, updating the traditional hospital gown to give patients greater coverage and comfort and to better accommodate medical equipment.⁶⁸ Downs Designs, a business located in Mentor, Ohio, goes a step further: Its clothing designers have developed garments sensitive to the abilities of wearers. The company produces custom-designed clothing for people with Down Syndrome, first introducing blue jeans that eliminated hard-to-use buttons and zippers and added elastic waists, and later expanding the line to include shirts, capris and shorts. The company also tailors its clothes to each customer's unique measurements.⁶⁹ In these ways, designers are solving critical healthcare issues, enhancing healthcare environments for patients and staff and developing innovative cross-sector partnerships.

Design as Industry Driver

As an industry cluster, the arts and culture sector yields significant returns to local economies in terms of short- and long-term growth potential. Pecifically, advances related to design and technology have created new opportunities for improving patient experiences and delivery mechanisms for care. In Cleveland, design significantly influences not only the medical field, but also, by extension, regional economic development. Many of the city's economic initiatives depend on design, from the Global Center for Health Innovation — a facility dedicated to creative product development in the medical and healthcare industries — to Cleveland's growing

Arts Integration in Healthcare Environments

Design District, which is home to leading firms in the fields of interior, graphic, urban, industrial and architecture design. In addition, local product designers are actively targeting Cleveland's expanding biomedical, healthcare and technology fields, creating medical devices and equipment that generate economic impact for our region. SmartShape, for instance, designs such products as ergonomic surgery tools, compact medical imaging devices and portable oxygen concentrators.⁷³ Local design firm Nottingham Spirk makes healthcare easier for people to reach by creating "HealthSpot Stations" that provide remote access to physician care through the integration of information technology applications. In addition, its designers have created devices eliminating the need for manual handling of biohazardous samples such as blood.⁷⁴

Through educational programs such as biomedical art,⁷⁵ a dynamic field that has many real-world applications, the Cleveland Institute of Art⁷⁶ has forged innovative partnerships with medical institutions such as Case Western Reserve University, University Hospitals Case Medical Center and the Cleveland Clinic, as well as arts and culture organizations including the Cleveland Museum of Natural History and Cleveland Botanical Garden. The biomedical art program involves work in both the physical and natural sciences and is being used, for example, in the creation of informational videos to educate the public about health topics such as Alzheimer's disease.⁷⁷

The Cleveland Institute of Art's game design department⁷⁸ also presents new opportunities for intersections with healthcare as the use of video games and applications to enhance treatment options for patients becomes more commonplace.⁷⁹ Gaming in healthcare is a rapidly developing industry and has the potential to bridge the gaps between medicine, education, entertainment and technology. Patients suffering from diseases such as diabetes, asthma, heart disease and cancer can use video games to promote recovery and wellness. For example, video games are helping children learn skills to regularly monitor their own glucose levels;80 teaching patients how to properly use an asthma inhaler;81 providing exercise instruction to patients recovering from cardiac events;82 and helping children visualize their fights against cancer.83 The Cleveland Institute of Art worked with a local game-development company, Lemming Labs Limited, to develop a mobile game application called "Billy Bear's Honey Chase" for University Hospitals Rainbow Babies & Children's Hospital's Pediatric Pain Service⁸⁴ to help pediatric patients with pain management issues. In addition, wearable-technology applications, such as Cardiolnsight's vest, 85 allow a person's health indicators to be remotely monitored and collected in a database for later analysis. Local technology firm Bennett Adelson has also developed mobile applications geared toward promoting general wellness, reducing stress and improving sleep patterns.86 In these ways health and design intersections are spurring Cleveland's economy forward and hold great promise for generating future innovations.

Conclusion

Physical spaces affect healthcare experiences for patients and their caregivers alike. Over time, arts and culture have come to be valued for more than their decorative uses and are increasingly being integrated with healthcare environments for therapeutic ends. With key partnerships developing between Cleveland's wealth of arts and culture organizations and its healthcare institutions, more visual artworks and performances are appearing in healthcare settings. Additionally, design considerations are directly influencing health and well-being and propelling Cleveland's economy with health products and services shaped by biomedical artists, game designers and other creative experts. These collaborations foster greater entrepreneurship in the arts and health fields and promise economic growth for greater Cleveland.

case study hospice of the western reserve



Ames Family Hospice House Exterior Photo courtesy of the Hospice of the Western Reserve

living until you die

What could make a very difficult thing a little easier?

Time, perhaps. Family, friends, faith. Sunlight, a view of sky or trees. A picture or music. A comforting place, where beauty and ease conspire to free mind and spirit from their troubles.

People in crisis need solace and support. And, for most people, no doubt, their own death or the loss of a loved one is the most emotionally wrenching crisis they will ever face. Even those for whom death promises a welcome release from suffering can feel sorrow, stress, fear or loneliness as they prepare to say goodbye.

It's the mission of the nonprofit Hospice of the Western Reserve to relieve suffering, enhance comfort, and promote quality of life for those with terminal illnesses while also supporting the people who care for them. Comfort care is also available for those living with chronic illnesses who do not qualify for hospice. As the professionals at Ames Family Hospice House work to manage the symptoms and improve the comfort of their patients, they also look for every means possible to support caregivers and families. At the center of hospice and palliative care is the belief that each of us has the right to die pain-free and with dignity, and that our families and caregivers will receive the necessary support to allow us to do so.

Hospice staff members in Westlake, Ohio, think their efforts have been made immeasurably more effective by a building design.

"This is state-of-the-art. There's no place like this in the rest of the country," says

Staff members'
efforts have
been made
immeasurably
more effective by
a building design.

Director of Residential Services Bob Plona as he strolls through the airy, gracious Ames Family Hospice House, which opened in 2012 after seven years of fund-raising, planning and construction. He adds that the beautiful-but-homey building embodies the staff's unofficial motto that Hospice is about "living until you die," not "dying until you die."

That's a sentiment architect Tom Mullinax believes in passionately. He's president of Hospice Design Resource, a firm based in Hilton Head, S.C., and his special focus on designing hospice facilities

such as Ames Family Hospice House – intensified by his caring for his mother in her last year of life – has made him a national expert on the subject.

The point of hospice care and of his work is to "give people the option of having the most wonderful experience anyone can have under those circumstances," Mullinax says with feeling. "It's a ministry as much as a career for me."

He strives to help people through design, seeing art as an important element in the uses of a hospice building as well as in its appearance. "Architecture is music. The fact is, you are composing an entire piece. I've done over 50 of these around the country now," he notes, but Ames Family Hospice House "was unique."

"Architecture is music. The fact is, you are composing an entire piece."

First, many people and much research were involved in the planning. Hospice of the Western Reserve did internal and external studies, says

Plona, and sought input from patients and their families, hospice staff, as well as from the Ames family, the project's main benefactors. Seven architectural firms were interviewed before Mullinax was selected to create the design, with local architectural firm Vocon chosen to collaborate on plans and construction.

Vocon helped research local building materials so that local patients would find the kinds of wood and stone they were used to, says Vocon Studio Director Julie Trott. Plona notes that Jay Ames, the family matriarch, chose the soft, natural blue, green and gold color scheme for the building's interiors. Green, indeed – the entire project is a model of environmental practices.

After two years of discussions during which Mullinax says he asked "a ton of questions" about every aspect of use and atmosphere, he chose an American Craftsman style for Ames House that give the 40,000-square-foot facility the human scale of an actual house, the plush spaciousness and natural setting of a country club, and the cleverly hidden efficiency of a hospital.

The cluster of gables that give the house its pleasingly varied outline of a small village? They're false fronts, hiding flat roofs that hold air-conditioning units and collect water that drains to a pond on the property. Inside, artist-designed friezes of stained-glass panels let in light near the top of the ceiling while hiding those same air-conditioning units from view.

The first thing anyone sees upon entering the building are cozy parlors with cushy furniture and a huge, magazine-beautiful kitchen where patients and families can cook and eat meals together. Enormous windows are everywhere, offering in views of the woods and gardens outside.

From the central great room, with its grand piano and game tables, a wide corridor loops around the building, lit by sconces rather than overhead fluorescent light, and lined with rooms of every sort: exercise, meditation, art therapy, music therapy, teen lounge, children's playroom; patient rooms with garden-side terraces and oxygen equipment

Hospice of the Western Reserve 17876 St. Clair Ave. Cleveland. OH 44110-2602 Phone: (800) 707-8922 http://www.hospicewr.org/

hidden behind paintings that slide up and down; family rooms that can be converted to guest rooms where family members – including patients' beloved pets – can gather, relax and sleep overnight. Rollaway beds and rocker recliners are also in each patient room for those who wish to stay near their loved ones. Two extra large rooms can accommodate large families.

Corridors are indented with "garages," deep alcoves that hide parked wheelchairs and carts from view. Deceased patients and their families have a dignified exit area accessible to vehicles and out of sight of the main entrance, to protect privacy and everyone's feelings. Staff members can walk an outdoor section of corridor or rest in their special staff lounge for needed breaks. Every door is wide enough to push a bed through, ensuring that patients at Ames House can go everywhere they want – outside, to do artwork, help bake cookies – whether they can walk or sit up or not. Nothing looks institutional: Real wood, soft carpet and upholstery prevail.

The list of ingenious solutions and humane amenities goes on and on. So do the roles of design and art in making the end of life as comforting as possible.

"Art is very important," says Mullinax. He calls it an essential part of helping people go through a profound change he compares to a caterpillar turning into a butterfly. "That's what hospice is," he says, "a cocoon that provides that transition."





Left: Ames Family Hospice House great room Right: Ames Family Hospice House family kitchen Photos courtesy of the Hospice of the Western Reserve

"I found I could say things with color and shapes that I couldn't say any other way – things I had no words for."

- Georgia O'Keeffe, American artist

Key Benefits

Research has demonstrated that participation in arts and culture activities and/or expressive arts therapies help patients:

- Express and channel emotions, especially those that are difficult to put into words
- Cope with diagnosis and treatment
- Reduce anxiety levels
- Connect with others around a perceived safe and approachable activity
- Set and achieve individualized, creative goals
- Control an aspect of their healthcare experience
- Raise levels of self-esteem
- Improve measures of specific clinical outcomes such as motor functioning, memory recall and vital signs

Overview

Evidence of participation in arts and culture can be found throughout prehistoric, ancient and contemporary societies. Over the course of human development, arts and culture activities have been valued for their utility in codifying traditions and uniting communities through activities that "facilitate[d] the need for belonging, finding and making meaning" while contributing to the development of physical skills.⁸⁷ In addition, arts and culture activities have provided outlets for expression of emotion, self-reflection and personal discovery. These perspectives have merged and expanded over time to form a much more transformative view of the role arts and culture can play in the lives of individuals and their communities. Arts and culture experiences can support outcomes that "redefine the self, build community, and address civic issues."88 The inherent ability of arts and culture to connect, inspire and engage at both individual and community levels has direct implications for the roles it can play when intersecting with the health and human services field.

For individuals undergoing medical treatment, participation in arts and culture activities has been shown to play an important role in boosting confidence, alleviating stress and improving clinical outcomes.89 An important distinction can be made between "expressive arts therapies" and the "therapeutic use of arts and culture": Expressive arts therapies are provided in clinical healthcare settings by "trained health care [sic] professionals to heal or ameliorate the effects of disease and disability," while the therapeutic use of arts and culture in healthcare settings includes artist-inresidence programs through which professional artists carry out arts and culture activities to promote health and wellness.90 This chapter looks at how participation in expressive arts therapies, as well as in arts and culture activities, is taking place in Cleveland.

Expressive Arts Therapies

Today, expressive arts therapies apply the disciplines of visual art, music, dance, literature and theater for the health benefits of participants. For example, visual and literary arts help grieving children and adolescents express their emotions following loss; wusic therapy decreases pain, anxiety, depression, and shortness of breath, and it improves mood in palliative medicine patients; dance allows veterans to tell their stories nonverbally and cope with post-traumatic stress disorder; writing and reciting poetry assists those with Alzheimer's disease and related dementia to recall memories; and drama therapy lifts mood and reduces pain levels for dialysis patients undergoing treatment. Expressive arts therapies have also yielded measurable outcomes such as stress reduction, pain management and improved motor and social functioning for groups such as veterans, autistic youth and stroke survivors.

Both art and music therapists must undergo certification processes to practice in the field. A minimum of a bachelor's degree or equivalent is required to become a board certified music therapist, while a master's degree is required to become a board certified art therapist. Locally, the Cleveland Music Therapy Consortium, which was formed in 1976, brings together the music therapy programs of the Baldwin Wallace University Conservatory of Music and the Music Department of the College of Wooster. The collaborative arrangement allowed a music therapy degree to be offered for the first time in Northeast Ohio. The region also provides Ohio's only source of Masters in Art Therapy and Counseling degrees, at Ursuline College in Pepper Pike.

Many groups use expressive arts therapies to benefit patients by helping them channel emotions, recover from trauma and alleviate stress.

Many groups use expressive arts therapies to benefit patients by helping them channel emotions, recover from trauma and alleviate stress. Arts and culture nonprofits make up one set of organizations that offers a wide range of such programs throughout the Cleveland area. The Music Settlement, for example, was a pioneer in the music therapy field, developing its Center for Music Therapy in 1966. Currently, the center offers therapy sessions for individuals with mental illness, terminal illness, learning disabilities and other social or behavioral disorders. It also provides music therapy programming in educational settings to enhance core curriculum standards being taught to children in social services settings such as the Salvation Army's Harbor Light complex for those who were formerly incarcerated, homeless and/or are recovering addicts; for adults in day programming at the United Cerebral Palsy Association; in medical settings such as the burn unit at MetroHealth Medical Center; in the palliative-medicine department at the Cleveland Clinic; and at the Cleveland Sight Center. 100 The Fine Arts Association also offers music therapy programs, serving the needs of people with Down syndrome, dementia, autism and cerebral palsy. It also offers programming through the Lake Hospital System. 101

Cleveland's Art Therapy Studio enhances the quality of life for those with physical, cognitive or emotional challenges through the therapeutic use of visual art. The organization was established in 1967 as a joint partnership with Highland View Hospital, which is now MetroHealth Medical Center, a partnership that continues today. Art Therapy Studio provides services to hospitals;

community agencies including United Cerebral Palsy, Cuyahoga County Board of Developmental Disabilities, Westlake High School, Eliza Bryant Village, Kindred Care at the Greens of Lyndhurst, Geauga County Board of Developmental Disabilities and the Ohio Buckeye Chapter of the National MS Society; and to the public through its four studios at Fairhill Partners, Ursuline ArtSpace, River's Edge at the St. Joseph Center and MetroHealth's Senior Health & Wellness Center. It also coordinates employee wellness workshops for local businesses, as well as professional development opportunities for practicing art therapists. ¹⁰² The Beck Center for the Arts coordinates both art and music therapy classes on site and throughout the community. ¹⁰³ Since 1999, the Beck Center has partnered with the Rock and Roll Hall of Fame and Museum, Head Start and University Hospitals Case Medical Center to offer a program called Toddler Rock. This program uses music therapy to improve the socialization, literacy and language skills of Cleveland's underserved three- to five-year olds. ¹⁰⁴ Movement therapy is being offered locally, as well, through efforts such as Verb Ballets' programs, which provide dance programming in nursing homes and assisted living facilities. ¹⁰⁵

Though the arts community represents a significant source of these services, many medical institutions offer their own expressive arts therapy programming. The Cleveland Clinic Arts and Medicine Institute has dedicated art and music therapists who work throughout the hospitals with individual patients at bedside, in groups, and in public areas with patients and families. The largest programs are with adult cancer, cardiovascular, and transplant patients and pediatric inpatients. For example, the art therapy program in the Taussig Cancer Institute helps individuals explore their emotions as they undergo treatment, and music therapy is provided to patients undergoing bone marrow transplant to help alleviate pain and anxiety during their hospital stay. Similarly, the Gathering Place offers expressive arts therapy classes for individuals faced with cancer, including those undergoing treatment, coping with the side effects of treatment, supporting someone with cancer or grieving over the loss of someone from cancer. MetroHealth Medical Center provides programming from Art Therapy Studio that aids several

is provided to patients undergoing bone marrow transplant to help alleviate pain and anxiety during their hospital stay.

in-patient groups, including those focusing on stroke, traumatic brain injury, mental illness and sub-acute care. Studio therapists also conduct out-patient art groups, an open studio, and an art and occupational therapy group for spinal cord injured patients. MetroHealth also continues to have in-house music therapists on staff. 108 University Hospitals has instituted pediatric art and music therapy programs at its Rainbow Babies & Children's Hospital as well as adult programs at its Seidman Cancer Center. 109 The Centers for Dialysis Care employs five full time art therapists and one full time music therapist who work throughout their facilities across greater Cleveland. Patients make art during their dialysis treatments as a way to cope with treatments, restrictive lifestyles (i.e. diet, impact on work, etc.), losses and co-morbid illnesses. It also offers patients a way to build community and celebrate life. 110 A conference called "The Art(s) of Healing Symposium and Exhibition" has been offered by the Louis Stokes Cleveland VA Medical Center at which veterans were given an opportunity to show their work and talk about how they are using expressive arts therapies. 111 The Hospice of the Western Reserve offers a series of Healing Arts Workshops led by art therapists to help participants

cope with grief through arts and culture activities such as the creation of remembrance quilts, craft objects and paper clay sculptures. In addition to these expressive arts therapy programs, the Hospice of the Western Reserve also offers bereavement counseling for groups throughout the community including workplace and school programs as well as crisis response services. The Cornerstone of Hope also uses art therapy to provide individual grief counseling to both young children and adults. Expressive arts therapies are also being utilized by organizations which specialize in the treatment of mental health issues such as Beech Brook and the Jewish Family Service Association of Cleveland.

Therapeutic Use of Arts and Culture in Healthcare

As the role of arts in healthcare has shifted over time, from more aesthetic use to practical applications, individual artists have become more involved in healthcare facilities. Artists are sharing projects and engaging others in their work through arts-by-the-bedside programs and as artists-in-residence. Arts-by-the-bedside programs bring customized performances directly to patients' bedsides. Artist-in-residence programs bring artists into healthcare settings in a more structured way for specified periods of time, allowing for the artist to become more integrated into the hospital environment and deepen relationships with those they serve. Whereas expressive arts therapies work toward treating the physical and psychological reactions associated with disease, the interaction of the artist with a patient or the interaction of the patient with a particular artistic medium are seen as ends in themselves. 117 Two of the oldest programs that bring the work of artists directly into hospitals are the Health Arts Network at Duke (HAND) and Arts in Medicine (AIM) at the University of Florida Health system, which combines the expertise of the University of Florida and its affiliate, Shands Healthcare. The HAND program was a key driver of the arts and health field as it organized one of the first gatherings of arts and health leaders and developed the first guide to developing arts and health programs. Today, HAND has established literary, performing and visual arts activities throughout the hospital, including eye center arts programs that allow the visually impaired to explore a "touchable" art gallery. 118 The AIM program, one of the largest in the country, has a staff of 16 paid artists who offer programs such as "Dance for Lifelong Health" for older adults, the creation of "Oral Histories" of patients, and "Art for the Heart" activities for patients waiting to receive heart transplants. 119 The program's "AIM Together" initiative was funded by the National Endowment for the Arts in 2004 to bring together Shands Healthcare with the University of Florida's Performing Arts department. The program welcomes world-class performers featured on the University of Florida Performing Arts's season schedule into the hospital for residencies and performances. 120

Thanks to technology, arts experiences can be customized for individual patients through the use of tablet computers and online materials that permit museum educators and curators to fill virtual gallery spaces with customized exhibitions for particular patients. For example, a partnership with the Palliative Care Department at the University of Rochester's Strong Memorial Hospital allows the director of education at the university's Memorial Art Gallery to choose and preload in tablet computers online images available at ARTstor.org. Over time, viewing sessions with patients yield increasingly refined image searches and selections based on each patient's preferences. Other organizations such as Music & Memory are using digital music technology to deliver customized playlists to the elderly or infirm to help them reconnect

to others through "music-triggered memories." ¹²² TimeSlips is an organization that uses creative story telling to help Alzheimer's sufferers and other dementia patients tap into their imaginations and break stereotypes about memory loss. ¹²³ In these ways, artists are aiding patients by encouraging their participation in what are called "creative encounters" in all types of healthcare settings. ¹²⁴

In Cleveland, medical institutions give patients and their caregivers the opportunity to experience, and take part in, a wide range of arts and culture activities. One of these, the Cleveland Clinic Arts and Medicine Institute, fills the hospital environment every day of the week with live performances from local musicians and arts and culture organizations. Its recently created Musicians-in-Residence program integrates a core group of local musicians into the hospital environment with regular performances in public spaces. Local nonprofits also present arts and culture activities in other medical settings, such as the Louis Stokes Cleveland VA Medical Center, where a local chapter of Guitars for Vets provides guitars and music instruction for ailing and injured military veterans to recover and express their emotions following trauma. Pathenson in partnership between Dance for Parkinson's Disease (PD), DANCECleveland, Cleveland State University, the Mandel Jewish Community Center is making ballroom, modern, ballet and improvisation dance classes available for those with Parkinson's disease through Yes...I Can Dance at the Mandel Jewish Community Center and Come Dance With Me at the Parma Hospital Health Education Center.

Engagement of Older Adults

Ohio has one of the highest percentages of adults aged 65 and over outside of traditional retirement states such as Florida and Arizona. ¹²⁷ The Cleveland metro area in particular has, at 15 percent, one of the highest concentrations nationally of such adults. ¹²⁸ Engaging older adults in arts and culture activities thus assumes particular importance in Cleveland and fuels the broader movement of "creative aging," an approach emphasizing the positive effects on older adults of participation in creative activities. ¹²⁹

Locally, many organizations engage older adults in arts and culture activities. For example, the Cleveland Museum of Art, the Alzheimer's Association and the Cleveland Clinic offer "Art in the Afternoon" tours for individuals with memory loss and their care partners. Through partnerships with the Cleveland Institute of Art, the Cleveland Institute of Music, the Cleveland Orchestra and individual artists, Access to the Arts provides arts and culture programming to the ill and

the elderly living in a range of healthcare facilities including nursing homes, hospitals, senior centers and retirement communities. ¹³⁰ Chagrin Arts offers a wide range of arts and culture events in the Chagrin Valley and works to bring programming to older adults at the South Franklin Circle and Hamlet Retirement Village in the Chagrin Falls area. ¹³¹ The Cleveland International Piano Competition partners with the Cleveland Clinic, Access to the Arts and the Golden Age Centers to give its contestants opportunities to perform recitals in area nursing homes, hospitals, hospices, senior centers and retirement communities. ¹³² The Cleveland Women's Orchestra provides free concerts for residents and guests at sites such as the Judson retirement community

Engaging older adults in arts and culture activities assumes particular importance in Cleveland.

and the Elisabeth Severance Prentiss Center for Skilled Nursing Care at MetroHealth. ¹³³ The Western Reserve Historical Society's "Magic of Memories" series allows participants to experience Cleveland's history by viewing photographs and artifacts in its collection that have been curated to fit themes such as "Custard, Coasters and Carousels: Remembering Euclid Beach Park" and "My Corner of Cleveland in Cedar-Central: The Lives of Louis and Carl Stokes." During historical-society programs, participants are encouraged to share their memories with others. ¹³⁴ The Solon Center for the Arts offers older adults its "ACT II: Aging Creatively through the Arts" programs, in which actors engage senior citizens in theater exercises and productions and singers involve them in vocal performance. ¹³⁵

Organizations specifically focused on serving older adults use arts and culture activities as well. At Eliza Bryant Village, residents create quilts to share memories and traditions and, through partnerships with organizations such as the Fatima Family Center, share them with

the community. 136 Assisted-living facilities in the Eliza Jennings network offer an Art Care Program that engages residents in activities such as creative storytelling, craft making and singing. 137 The Katz Policy Institute of Benjamin Rose has partnered with local area aging and arts organizations to establish the Northeast Ohio Center for Creative Aging (NEOCCA) in 2007. 138 The NEOCCA, one of only 14 centers in the U.S. and the only one in Ohio, helps with arts engagement by sharing information on local arts programs for baby boomers and older adults. Judson, a nonprofit retirement community in Cleveland's University Circle area, has brought its residents together with local students to form an ensemble that performs show tunes. 139 Such partnerships have strengthened the community by encouraging intergenerational relationships between the elderly and the young. 140 Additionally, University Circle Inc.'s Senior Connections program uses videoconferencing technology to connect senior citizens with learning opportunities and arts and

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culture experiences through partnerships with such organizations as the Cleveland Botanical Garden, Cleveland Museum of Art, Cleveland Museum of Natural History, Cleveland Institute of Music, Cleveland Institute of Art, Cleveland Orchestra, Cleveland Play House, Temple-Tifereth Israel, Western Reserve Historical Society and ideastream. ¹⁴¹ Expressive arts therapy options are also offered by nursing facilities such as Malachi House, ¹⁴² McGregor ¹⁴³ and Menorah Park. ¹⁴⁴

Conclusion

Participation in expressive arts therapies and arts and culture activities is decidedly person-centered. Such activities are structured to meet the needs of each individual participant and are developed based on mutually agreed upon goals. Cleveland organizations use a wide variety of expressive arts therapies to bring about positive clinical outcomes for patients. Cleveland's wealth of educational programs focused on the expressive arts therapies, as well as its historic role in the development of the field, set it apart as an expressive arts therapy leader. In addition to expressive arts therapies, general arts and culture activities are also being used to empower individuals in the creation of artwork and are well-suited to meet the emotional, physical and social needs of specific groups like older adults. Collectively, Cleveland's expressive arts therapists and individual artists are key champions of promoting the role arts and culture have to play in the medical field's broader movement toward more patient-centered care.

case study art therapy studio



"CityScape" by Scott Mars, a participant in the Art Therapy Studio's community art program Photo courtesy of Art Therapy Studio

color helps

Art makes Scott Mars feel better.

He likes to look at it, yes, and knows about a wide range of artists and styles. But he especially likes to create it. When he does, he also creates what he calls his "safe space," a space "that nobody can invade."

Mars copes with depression, anxiety and obsessive-compulsive disorder. He's been coming to the Art Therapy Studio on the eastern edge of Cleveland since 1995 to take classes, where he makes paintings and ceramics, honing his increasing skills. On this November day, he's about to begin a triptych, a painting in three panels influenced by the recent loss of his brother. Color helps: The triptych will be full of yellows, greens and reds, and though the content will be "extremely ambiguous," some things will be recognizable, Mars says.

Does working with paints and clay cheer him up when he's sad? "Absolutely," he says. "One hundred percent."

Science agrees with him. "Human beings have been making [visual] art since the dawn of time," observes Jennifer Schwartz Wright, executive director of the Art Therapy Studio and an experienced therapist trained in both psychology and art.

Our brains have evolved accordingly, she explains, giving us not only the aptitude and desire for art-making, but also a sense of pleasure when we do it. In fact, creating art engages the same pathways in the brain affected by antidepressants.

"So it feels good," Wright says. "To me, it's like eating fresh fruit. You need to do healthy things."

And studies agree that art is one of those. Scientists have looked at the effects of art-making on various types of patients, including those suffering from trauma, chronic ailments, mental illness, social disconnection or specific physical illnesses such as neurological disease, juvenile diabetes and cancer, and have found evidence that creative art therapy helps people in numerous ways. Whether subjects are lonely, grieving, stressed, ill or injured, making art reduces their anxiety and allows them to express feelings they hadn't been able to talk about. It also provides safe social interaction, improves bonds between patients and their loved ones, and helps patients with limitations improve their capacities, such as dexterity or concentration.

For instance, in a 2007 German study led by Harald J. Hamre, M.D., and four other scientists that followed 161 chronic-disease patients under the care of 52 different art therapists, art therapy was found to reduce the patients' disease symptoms long-term and improve their quality of life.

Therapists such as Wright work with a patient's doctor to determine the right kinds of therapies for that patient's unique problems and needs. Choosing art materials is important, she says. They need to be culturally familiar to the patient, so he or she will feel comfortable with them, rather than daunted or bewildered, and they need to be



Desiree, a participant in the Art Therapy Studio's program at Louis Stokes Veterans Affairs Medical Center received Best of Show for her watercolor landscape at the Cleveland Wheelchair Veteran's Art Show.

Photo courtesy of Art Therapy Studio

things that the patient can handle easily despite any disabilities. Aluminum foil, masking tape, empty jars and other everyday items can serve well, Wright notes.

Patients don't have to know how to draw, either. Therapists know a wide range of artistic disciplines and techniques helpful to art novices, and can engage them in basic art forms, such as collage, that provide the needed benefits. Wright used a technique in graduate school that involved passing a piece of clay around to every person in a therapy group for inpatients with schizophrenia, so each could make a change in it. Eventually, the class shaped the clay to look like a rabbit.

The task encouraged teamwork and connection, and kept each patient in the moment, Wright notes. "Talk about focusing on the here and now," she recalls with a laugh.

Goals of that kind make clear the difference between therapists and art teachers: With their training in psychology, therapists are scientists for whom art is both a diagnostic tool and a primary means of healing people. They know how to set up the structure of a session so that it has certain predictable elements and provides a grounding experience for the patient. Just as important, they know how to "read" the artworks that patients create over time for hints of what's on their minds and for signs of change, and so can help physicians interpret the artistic evidence and detect the presence of symptoms.

None of this takes place under a cone of silence. To learn about their patients, therapists need dialogue to go with the pictures. "You want to know what their motivation is. You have to talk to them, ask them about their art," Wright says. "That's a big deal in art therapy: intention. The art doesn't lie." Talking also leads to trust and a sense of safety for the patients, she adds. "We are clinicians more than artists, but we come to that relationship through art, which is safe."

Studio therapists work with brain-injury and stroke patients as part of the MetroHealth Rehabilitation Institute of Ohio team. They hold community classes at four locations: their headquarters at Fairhill Partners at Fairhill Road and 124th Street in Cleveland, the Ursuline College campus in Pepper Pike, River's Edge in St. Joseph Center at Kamm's Corner on Cleveland's West Side, and at MetroHealth Senior Health & Wellness Center in Old Brooklyn. And they also provide group and one-on-one services to patients at such locations as the Louis B. Stokes VA Medical Center, the Cleveland Clinic, Westlake High School, United Cerebral Palsy and Eliza Bryant Village.

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Often, art-therapy patients don't have any clue what to make, at least at first. In those cases, Wright says, the therapists try to guide them, suggesting themes familiar enough to be accessible.

Mars has his own ideas — lots of them. Among the ranks of ceramic pieces lining the windowsills in the studio room, Mars has a striking wizard sculpture made Gaudi-style with cascading blobs of clay. His sketch book teems with complex arrays of small black-on-white scroll and cup shapes, triangles, pinwheels; on one page, he's drawn an arresting ink sketch of rock star Jimi Hendrix in a scribbly style, intricate and vivid. In one of his paintings, thick lines separate Edvard Munch-style figures, describing the distance between people, Mars explains. "I love my canvases," he says.

Desiree Douglas loves hers, too. An Air force veteran, she was introduced to art therapy through the Louis Stokes Cleveland VA Medical Center, where her work now adorns the dining room. Though she had always loved drawing in pencil and ink, multiple sclerosis had affected her ability to do the detailed sketches and forced her to give up art. Or so she thought, until Denise Cooper at the Art Therapy Studio helped her discover painting.

"It was like a life just came back," Douglas says.

Now she works in watercolors, oils and acrylics, and has won awards for three years. "It uplifts me, it keeps me on a positive note," she says of her art. "It's amazing what it does when you've been sick."

The activity also gives her a sense of accomplishment. And when she's working in a group, it relaxes her and helps her feel a bond with her fellow painters, Douglas notes. Best of all is the feeling she gets when someone enjoys what she's made. "When I see someone light up, it does an amazing thing on me," she says. "When you bring someone joy, that makes everything worthwhile."



WheelArt – Wheelchair artists roll through colorful pools of paint to create unique designs on fabric using their wheels as paintbrushes. Photo courtesy of Art Therapy Studio

"Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits."

- Article 27, United Nations' Universal Declaration of Human Rights, 1948¹⁴⁵

Key Benefits

Research has demonstrated that arts and culture benefits public health and human service delivery outcomes by:

- Drawing attention to specific health and wellness issues such as disease prevention, nutrition and exercise
- Making uncomfortable health topics more approachable
- Reaching specific population groups through customized programming such as children and teens, the disabled, veterans and older adults
- Utilizing less punitive measures to address community issues such as substance abuse, homelessness and violence

Overview

The formal development of the community-based arts and culture field was influenced by the Arts and Crafts movement's (1860-1910) emphasis on high-quality artisanship in the production of everyday items as well as New Deal programs (1933-1936) that engaged artists as a workforce. 146 Throughout this period, the artist was increasingly valued "as an integral part of community life, working with and for ordinary people."147 Throughout the latter half of the 20th century, increased social activism in the political realm gave artists opportunities to develop collaborative projects with communities, provide expressive outlets for marginalized groups, engage non-artists in the creation of work and catalyze community social action related to issues such as poverty, workers' rights and civil rights around which groups could rally.148

More recently, attention has focused on how arts and culture activities promote broader ideas of well-being from a quality of life and happiness perspective. 149 While measures of well-being and happiness are shaped by personal factors including genetics and personality, external factors have been found to play an important role, as well. The type of society a person lives in directly influences the quality and nature of available lifestyle choices that determine how a person is able to live. 150 The roles of arts and culture in influencing a society's nature is paramount, as "it is from community that the arts developed and it is in serving communities that the arts will thrive." 151

Within their communities, individuals participate in arts and culture activities as observers, creators, facilitators and supporters. Whether through formal or informal outlets, engagement in arts and culture has been shown to mediate greater civic engagement and efficacy among participants. 152

Creative activities such as storytelling, community art projects and public design workshops can help involve stakeholders in decision-making processes and strengthen the public's ties to community values. Such activities help strengthen social capital, which has been shown to yield positive outcomes for physical and mental health. Social capital refers to the networks that exist among citizens and the cooperation and trust that is fostered by their inclusion in a dense web of social interactions, which in turn facilitate co-operative action among individuals and communities. The presence of strong social capital also contributes to the development of so-called healthy cities, as it influences issues such as economic performance, health and well-being, crime levels, educational outcomes, and governance. In addition to strengthening social ties, arts and culture activities can be rallying points from which communities can address public health issues. This chapter will explore the role arts and culture play in addressing public health concerns and in overcoming social inequities related to the health needs of specific groups.

Public Health and Human Services Delivery

The field of public health is concerned with the prevention of disease and promotion of healthy lifestyles in groups of individuals through awareness campaigns and the coordination of activities such as vaccinations, motor-vehicle safety, workplace safety, infectious diseases management, nutritional education and prenatal care. Charles-Edward Amory Winslow, a key figure in the development of the field in the United States, described public health in 1920 as "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations public and private, communities and individuals."160 Over time, the power of social forces to affect public health has been given more recognition in the field. As a result, arts and culture activities are increasingly being used to promote public health in a number of ways. Arts and culture activities can help engage audiences in public health issues, spurring discussion and action; provide opportunities to collect qualitative data directly from community members on public health issues; empower communities to change public health behaviors and environments; and encourage different groups to collaborate, effecting changes in attitudes and behaviors relating to public health. 161 Folk arts, including such activities as quilting, storytelling, basket weaving and traditional dance, play an important role in community-based arts practice because of their ability to reflect cultural heritage and values, involve new generations in meaningful experiences and unite groups. 162 Public health research has increasingly focused on such outcomes because of the "potential for people's social connections to reduce health inequities" by making access to community resources more readily visible and available to citizens. 163 For children in particular, the quality and quantity of social relationships has been shown to play an important role in aiding in the healing process and overall well-being of children. 164

Social Equity, Arts and Culture

Social equity is a concept that has its roots in public administration theory and is defined by the National Academy of Public Administration as "The fair, just and equitable management of all institutions serving the public directly or by contract; the fair, just and equitable distribution of public services and implementation of public policy; and the commitment to promote fairness,

justice, and equity in the formation of public policy."165 When applied to healthcare practice, concerns about equity focus on disparities in health outcomes for different groups of people. The National Institutes of Health first defined health disparities in 1999 as: "differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States." This became the basis for the legal definition of a health disparity population in 2000 which exists "if there is a significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates in the population as compared to the health status of the general population."166 Community environmental factors that influence health outcomes can be grouped into four areas: equitable opportunity to access jobs, education and other resources; the infrastructure and amenities available in places such as stores, parks and transportation; the social capital and community engagement of residents; and availability and accessibility of quality health services. 167 Such environmental factors reduce or increase the prevalence of health inequities through exposures and behaviors. For example, direct exposure to pollutants such as those in the air or water can hurt people's health. Other factors, such as the absence of a neighborhood grocery store, can prevent neighborhood residents from having access to healthier food options, which can contribute to negative health outcomes. 168

Arts and culture practices are being used nationally and internationally to increase awareness , as well as mediate the effects, of such health inequities. Such groups as Design Impact embed designers in local nonprofit organizations to achieve so-called "social impact design" outcomes by addressing the social needs of communities through urban nutrition programs for children, indoor air-pollution reduction programs, and women's health programs. 170 The Yale School of Public Health has engaged colleagues at its School of Art in the creation of public health posters to build awareness, and encourage discussion, about pressing health issues, thus changing negative behaviors relating to them. 171 PhotoVoice empowers disadvantaged and marginalized communities through the use of "participatory photography" and storytelling to advocate for social change. 172 Theatre of the Oppressed uses interactive theater to spark discussions about situations in which groups of individuals are denied basic human rights. The audience engages in brainstorming with the actors during performances to offer alternatives to the problems being depicted on stage. 173 The Dance Art Foundation's Breathing Space program supports public health initiatives for active lifestyles and participation in communal activities by transforming any kind of physical movement into dance, including simple movements such as blinking or breathing. 174

Public Health and Human Services Delivery in Cleveland

The Cleveland Department of Public Health's mission is to improve "the quality of life in the City of Cleveland by promoting healthy behavior, protecting the environment, preventing disease, and making the City a healthy place to live, work, and play." Since 2011, the Department of Public Health has supported the implementation of the "Healthy Cleveland" initiative, which brings together the city of Cleveland with four major local medical institutions: the Cleveland Clinic, University Hospitals Case Medical Center, MetroHealth and the Sisters of Charity Hospital System. Its goal is to reduce health disparities and improve overall quality of life for Cleveland residents. In a number of ways, arts and culture activities have been used to support broader public health outcomes that are aligned with the mission of the Department of Public Health. For

example, the Cleveland Museum of Natural History's GreenCityBlueLake Institute coordinated the PNC SmartHome Cleveland initiative in 2011 to demonstrate how the application of energy-efficient design in housing could alleviate some of the effects of climate change. Specific to air quality, the SmartHome demonstrated how high indoor air quality could be achieved for occupants while also minimizing greenhouse gas emissions from heating/cooling appliances to support a healthier outdoor environment over time. 176 The model SmartHome that served as the centerpiece of this initiative was recently named the state of Ohio's first certified "Passive House," representing achievement of the highest standards in energy efficiency in building design.¹⁷⁷ In addition to such air quality issues, food safety and nutrition are being promoted through the Cleveland Botanical Garden's Green Corps program, which conducts outreach with local neighborhoods to teach about gardening and healthy food options, improve access to healthy food and provide home gardening supplies.¹⁷⁸ Another organization, Rid-All Green Partnership, converted an empty piece of land in Cleveland's Kinsman neighborhood into an urban farm to raise locally grown produce, as well as fish through its aquafarming program. They have promoted the project to local students through the development of a comic-book series, which was adapted for a theater production at Karamu House. 179 Active lifestyles are also being promoted through organizations such as LAND Studio, which worked with Slavic Village Development to develop a public art plan for the community's Morgana Run Trail. Morgana Run incorporates different forms of public art to draw attention to aspects and uses of the trail itself, including murals depicting Clevelanders taking part in exercise and other activities, and a large flower sculpture titled "Rotoflora," which is composed of recycled bicycles. 180 LAND Studio has also worked with Rust Belt Welders and the city of Cleveland to expand urban transportation options by making the city more bike-friendly. Their Bike Box project converts steel shipping containers into "bike garages" throughout neighborhoods in the city. 181 Prioritizing bicycling and other alternative transportation options affects not only environmental sustainability concerns but also equity considerations regarding populations underserved by traditional transportation options.

Local public broadcasting is also advancing awareness about health topics. An ongoing series called "Be Well," featured on ideastream, focuses on health topics including stroke, diabetes, depression, obesity and heart health. As part of their special "Surviving Stroke" coverage in conjunction with The Plain Dealer, NetWellness and WKYC Channel 3, ideastream and the Cleveland Clinic's Center for Ethics, Humanities and Spiritual Care hosted a radio-drama adaptation of the play "Wings," which tells the story of an aviatrix and wing-walker who is recovering from a stroke. 183

Arts and culture programming is also being used for health outreach and education to children and teenagers. Art Sparks¹⁸⁴ offers a good example: It hires teams of dance instructors and musicians to bring children health-specific programs such as "Hip Hopping Heart Health," "Fabulous Flexibility," "Beautiful Balancing Bones," and "High Five Fitness," which are offered through the Center for Arts-Inspired Learning (formerly Young Audiences of Northeast Ohio). Through the center, MorrisonDance also offers programs such as "Fit Fun Frolic" and "Seventh Inning Stretch: Creative Ways to Get Your Classroom Moving" to teach students in a wide range of age groups about physical activity and movement through dance. ¹⁸⁵ The center offers additional health-oriented programs for pre-K students called "Happy Healthy Me" and "Yummy Songs and Stories" to teach students about nutrition and healthy food choices while also building vocabulary and phonetic skills. Another of its programs, called "Get Up, Let," teaches students in grades 3-12 about dance as exercise. ¹⁸⁶

Cleveland cultural institutions of all kinds have developed health-related educational programming for children. Roots of American Music's Live It Up — Health Living Program gives two teaching artists the opportunity to teach children dance steps to demonstrate the concepts of music and movement, encourage healthy lifestyle and enrich the State of Ohio's physical education curriculum standards. ¹⁸⁷ The Cleveland Museum of Natural History offers a series of health education programs for children and teenagers on topics such as nutrition, genetics and epidemiology. Its distance learning programs, such as "You Are What You Eat," "Just Senseless,"

and "Chew on This: Learn the Drill on Dental Science," are bringing the museum's educators virtually into classrooms throughout the United States, as well as in international locations. ¹⁸⁸ In addition, the Mandel Jewish Community Center recently created a children's garden to give children an opportunity to cultivate fruits and vegetables and learn about healthy food options. This garden is one component of a broader program focused on teaching three- to five-year olds about physical activity and healthy eating habits. ¹⁸⁹ The Children's Museum of Cleveland has partnered with University Hospitals Rainbow

Arts and culture programs are sparking discussions about children's and teenagers' public health issues.

Babies and Children's Hospital to offer opportunities for children to learn about going to the doctor and about motor-vehicle safety in its "Bridges to Our Community" exhibit. This exhibit gives children the opportunity to explore replicas of community places such as hospitals. The museum also has a new exhibit, called "I Feel: Understanding Emotions Together" and developed in partnership with Cuyahoga County's Office of Early Childhood/Invest in Children, to help children learn about emotions. ¹⁹⁰ Through the use of the performing arts, the Cleveland Clinic engages second graders in the study of health topics and introduces them to health career paths in their "Spotlight on Learning" initiative. ¹⁹¹

Other arts and culture programs are sparking discussions about children's and teenagers' public health issues. Through its Creative Diversion Program, for instance, Cleveland Public Theatre works with schools to address the topics of youth violence, teen relationships and bullying. Case Western Reserve's Infectious Disease (ID) Alliance has empowered local teenagers to serve as "peer educators" and teach others about sexual health through the creation of a YouTube video series providing access to student-led interviews and discussions. 192 The Center for Families and Children's RapArt program uses dance to help youth who are facing health and behavioral challenges. 193 A Cultural Exchange, a literacy-based multicultural arts organization for children, offers programs such as "Chapters: A Book Club for Young Achievers" to combat dropout rates among African-American students and "Bank on Books: Investing in our Families" to promote the financial literacy of children and their families. 194 Arts Collinwood hosted an exhibit called "Proud to SmokeOUT," sponsored by ButtOut Ohio and the LGBT Community Center of Greater Cleveland, that highlighted the work of Northeast Ohio LGBT students in curbing tobacco use. 195 The Chagrin Valley Little Theatre offers "Accent on Youth," an outreach program that uses theatrical productions as catalysts for discussions among youth on topics including teen suicide, date rape, drug abuse and conflict resolution. 196

A number of organizations focus on the specific field of arts and disability. The aims of their work include "embracing artwork by people with disabilities and activities involving people with disabilities as artists, participants and audience members." To those ends, they raise awareness about disabilities and ensure that all individuals have equal access to arts and culture

activities and equal opportunity to participate in them. For example, the Beck Center for the Arts partners with the Cuyahoga County Board of Developmental Disabilities to offer "Razzle Dazzle," an inclusive program of musical theater created and performed by adults with special needs. 198 Dancing Wheels, a professional dance company, pioneered the development of "physically integrated dance" by creating a performing company of people with and without disabilities, proving that the field of dance could be fully and equally accessible to people of all ability levels. 199 Verlezza Dance also engages professional dancers of all ability levels and uses its performances and educational programs to help individuals explore their creative potential. It has partnered with groups such as the Cuyahoga County Board of Developmental Disabilities, the Cleveland Clinic and Mayfield Village's Department of Recreation.²⁰⁰ At the Hattie Larlham Creative Arts studio, individuals with developmental disabilities can explore their artistic interests and work with professional artists to achieve their visions.²⁰¹ The Ohio Philharmonic Orchestra has offered performances to special needs audiences through its Christopher Robertson Brown Outreach and Educational Concert Series.²⁰² Like Dancing Wheels, Cleveland Hearing and Speech Center's SignStage Theatre has won national renown for its innovative work in arts involving the differently abled. SignStage presents plays in which actors simultaneously use spoken words and sign language, allowing both hearing and deaf audiences to seamlessly understand what is happening on stage without the use of a third party such as an interpreter.²⁰³

The work of such Cleveland organizations benefits from local and international support organizations. Very Special Arts (VSA) covers both levels: An international organization dedicated to arts and disability, VSA also has a Cleveland chapter, VSA Ohio, that coordinates an annual festival creating opportunities for active arts and culture participation in visual, performing and literary arts activities for individuals with and without disabilities. 204 Local government support for HeARTworks Gallery and Gifts, which sells artwork and items made by people with developmental disabilities in Cleveland's Galleria, comes from the Cuyahoga County Board of Developmental Disabilities and Solutions at Work (SAW, Inc.). 205 Collaborations, such as the Cleveland Sight Center's and the Cleveland Orchestra's music study groups for people with vision loss 206 and The Music Settlement's partnership with Inlet Dance Theatre to offer dance and movement workshops for disabled individuals and their families, help as well. 207

Arts and culture are also reaching underserved populations and drawing attention to pressing social issues. For example, Cleveland Public Theatre's Y-Haven Theatre Project works with homeless men who are in recovery from drug and alcohol addiction, helping them learn artistic and technical aspects of theater, create plays based on their own personal experiences, and perform them in homeless shelters, recovery centers and on college campuses across Cleveland. The Cavani String Quartet offers "Informances" – informal concerts – for those unable to attend performances at traditional venues, including those in correctional institutions and patients unable to leave healthcare facilities. The Care Alliance Health Center has hosted a "Homeless Book Club" that invited the homeless to discuss their life experiences and emotions as they relate to characters portrayed in book club selections. This forum allowed the Care Alliance to integrate health literacy messaging in the discussions.

Cleveland Public Library's Literary Lots program makes use of vacant lots in culturally underserved neighborhoods to bring educational programming to children. Through this program, local artists create participatory activities for children that bring literary works to life while also helping to build connections between arts and culture partners and local neighborhoods. One of the library's recent projects, a partnership with Ohio City Writers, Art House Inc. and LAND Studio, was held in the Ohio City neighborhood. Its young participants navigated through scenes depicting food events in children's literature, such as the tea party from

"Alice's Adventures in Wonderland." Mass-media arts encouraged discussion and education about community issues in the Cleveland Rape Crisis Center's partnership with the 2012 Cleveland International Film Festival. The two organizations presented a film called "A Lot Like You," which tells the story of a woman who traces her cultural roots in Tanzania and uncovers stories of rape and abuse. A rape survivor herself, the woman uses her journey to become a storyteller, to "ignite dialogue and inspire deep introspection" about rape and abuse because "truth that is never spoken can never lead to change." In a film titled "Brave Miss World" that was presented at the 2013 festival, a Miss World pageant winner used her new fame as a platform to tell her story and empower other rape survivors to tell theirs. 214

Arts and culture have also become avenues for community dialogues about death and bereavement. In the fall of 2013, the Sculpture Center presented an unusual exhibition in partnership with the East Cleveland Township Cemetery and the Alfred and Norma Lerner Tower of University Hospitals Case Medical Center. Called "Made in Mourning: Contemporary Memorial and Reliquary," it used art installations to initiate thoughts and conversations dealing with death. An accompanying lecture series called "The Dirt on Death" was intended to generate broader community discussions on death and mourning in contemporary society. An upcoming 2014 exhibition at the Museum of Contemporary Art (MOCA) Cleveland called "DIRGE: Reflections on [Life and] Death" will feature a wide range of pieces exploring different reflections on death, memory and grief. 216

Conclusion

Arts and culture organizations serve as powerful partners in efforts to address public health and social equity issues. Throughout Cleveland, specially designed arts and culture programs spark discussions on particular health topics and engage community participants of all kinds in activities that promote better and broader health and wellness outcomes. Cleveland's arts and culture sector is a vital resource for drawing attention to pressing community health concerns, providing opportunities for breaking stereotypes and strengthening community ties.

case study cleveland museum of natural history



Melissa Duy, Health Education Coordinator Photo courtesy of the Cleveland Museum of Natural History

banishing boredom

At the Cleveland Museum of Natural History, dull health classes are not allowed.

Young children learn about their five senses from puppet plays and dental health from brushing the teeth of Mr. Bigmouth, a working model of a jaw. Others play along with "Disease Detectives," a mystery-story video that contains clues for them to discover the ways illnesses start and spread. Humor helps teens lose their discomfort with the names of body parts. And vivid imagery acts like mental refrigeration, keeping lessons fresh in all the students' heads.

There's an art to jazzing up health information so kids remember it. In fact, there's any number of arts to it and Lee Gambol practices many of them. As the museum's distance-learning coordinator and science instructor, she uses her theater and biology backgrounds to turn learning into memorable fun for young people in Northeast Ohio and beyond.

What works for kids, Gambol says, is not just watching, but doing. And drawing has special appeal.

"There's something fascinating and magical about someone's pencil going across the board," she explains. "The process of communicating by imagery is very powerful."

Children will watch an artist sketching bacteria shapes, rapt. But then they want to try it for themselves. "And that's what they take home, their drawings," Gambol notes.

For that reason, getting students to take home information in their heads as well as in their hands has become a process that's as creative for the children as for their health instructors at the museum. Says Health Education Coordinator Melissa Duy, art as part of the learning experience "is something that just makes it unique and different."

She thinks children remember Bob the "blind" puppet better than they would a teacher just talking about sight. And they absorb a lesson about effective washing better when

they get to cover their hands first

Because health is "ever-evolving," the content of classes and the methods used to present it have to change, too.



Skeletal display, Cleveland Museum of Natural History Photo by CPAC



Bob the "blind" puppet Photo by CPAC

with colored powder that sticks to the places where bacteria have gathered.

Gambol uses herself as an example: Though she likes teaching, she was a somewhat unenthusiastic student because "sitting and listening is not my bag." A drawer of dragons as a child and a professional puppeteer as a young adult, Gambol found she enjoyed the technical backstage work of theater more than performing and wanted to do something that involved science. She ended up working at the Great Lakes Science Center for four years, then joining the touring "Mr. Wizard" show and brought that sensibility — "doing all these crazy 'Mr. Wizard' things, blowing stuff up" — to HealthSpace Cleveland, a health museum and educational organization that was the first in the area to undertake videoconferencing and distance-learning.

When HealthSpace merged with the natural-history museum in 2007, Gambol came along, bringing her arts-based teaching techniques with her. She and her colleagues in the museum education department now reach almost 76,000 students: nearly 45,000 through school programs held at the museum and over 31,000 through in-school or distance-learning outreach programming.

Now, Gambol uses camera angles and video story-telling to banish boredom from museum classes, abetted by colleagues with their own scientific knowledge and artistic skills, including a digital-animation wielding physiologist and Duy, whose master's degree in public health and sense of humor help teens discover the comedy in puberty. Her class "Growing Up and Liking It" takes a straightforward and scientific but amused approach to the official terms for body parts, as well as their nicknames, she says, which allows young people gradually to become comfortable using the proper ones.



Reproductive system display, Cleveland Museum of Natural History Photo by CPAC

"That's my favorite class, just watching that transformation," Duy says.

Because health is "ever-evolving," she adds, the content of classes and the methods used to present it have to change, too. So whether a new prop is needed or recent studies demand new instructions for elementary-school hygiene students, creativity and effective re-design stay important to the museum's education department.

Cleveland Museum of Natural History

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To the students, too: Taking part and making art are always the keys to student interest in any lesson, Gambol says. "All of our programs rely heavily on the student volunteer standing up and taking part. Part of that artistic process of learning is, 'Don't push that button, I want to push it myself'... the idea of 'Can I make that noise?' Everybody here draws on the chalkboard constantly."

So it's not unusual for museum classes to be overtaken by, say, weird beepings as kids try to imitate the sound of a school fire alarm. Or by silence, as children examine an animal skull and then draw pictures of its teeth, reinforcing their memories by turning them to art. Or by hilarity, when Gambol plays stand-up comic and challenges a class of teenagers to consider how darned odd she feels, talking about private parts to roomful of perfect strangers.

"When you're talking to a bunch of high-schoolers about STDs ... you have to laugh about it," she says matter-of-factly. "Laughing is a safe bond. And they're going to laugh at you, anyway – better to give them permission."



Lee Gambol teaching "Just Senseless," a distance learning course Photo by CPAC

He who studies medicine without books sails an uncharted sea, but he who studies medicine without patients does not go to sea at all.

- William Osler, founding physician, Johns Hopkins Hospital

Key Benefits

Research has demonstrated that exposure to arts and culture in medical training helps practitioners:

- Develop higher levels of empathy, trust and self-awareness with patients
- Hone observational skills which aid in making diagnoses
- Interpret the personal narratives of patients
- Cope with emotions associated with the care of patients
- Deliver patient-centered care
- Alleviate personal stress

Overview

The release of the Flexner Report in 1910 led to sweeping changes in the manner through which medical education was taught in the United States. Its namesake. Abraham Flexner, was a former teacher and educational expert hired by the Carnegie Foundation to identify key ways of improving the structure of medical training. During this period, the Carnegie Foundation was focusing its resources on improving the nation's healthcare field and conjectured that the poor state of medical training was a key weakness. To test this hypothesis, Flexner traveled the country to carry out a survey on the quality of U.S. medical schools; by his own account, he ultimately visited some 150 schools.²¹⁷ In preparation, Flexner studied German medical pedagogy, which emphasized initial laboratory work for medical students followed by clinical practice in university hospitals. Johns Hopkins School of Medicine in Baltimore had already implemented such a German-style model²¹⁸ and served as the "gold standard" by which Flexner measured other medical schools.219

Upon completing his survey, Flexner reported a high degree of variance between the quality of instruction and level of experience doctors received through existing medical schools. Without enforceable medical curriculum standards, any group of physicians could establish a for-profit medical school and grant "degrees [that] were scarcely worth the paper they were written on."220 Flexner's report ultimately became the catalyst for the closing of many "substandard medical schools that were flooding the nation with poorly trained physicians"221 and the call to action for "wedding [medicine] with biomedical science."222 Philanthropic support from the Carnegie and Rockefeller foundations ensured that Flexner's model for medical education was instituted and sustained throughout the 20th century. In this environment, the concept of a "fulltime" system in medical schools also took hold,

establishing the idea that "the advancement of knowledge was to trump all other involvements in the academic physician's life." ²²³

For William Osler, one of the four founders of Johns Hopkins who instituted the first residency program for medical students there, the primacy of research stressed by the Flexner report was too narrow a focus for practicing physicians, who needed contact and experience with "the realities and messy details of their patients' lives." ²²⁴ While Osler recognized the importance of science in medicine, his humanistic philosophy called for prioritizing "the welfare of patients and the education of students to that effort" first. ²²⁵ Today, Osler's calls are being echoed in the movement for more patient-centered care and interdisciplinary studies in medical programs called medical humanities. This chapter will explore the development of medical humanities programs and the ways art and culture are enriching medical students' education.

Medical Humanities

In the United States, the oldest medical humanities programs emerged in the 1960s and 1970s as a reaction to perceived shortcomings in the teaching, practice and evaluation of medicine. While clinical medicine undeniably provides the essential knowledge medical practitioners need to describe symptoms, diagnose illness and determine its causes and treatment options, it has limits in its ability to fully represent a patient's personal experience of living and coping with a disease.²²⁶ Patients' personal stories are unique and so too are the ways a disease affects "their ability to do things, to relate to others, to live as they have before in the world."227 The field of medical humanities offers a way to reconcile knowledge with experience: It enhances the clinical training of physicians through the study of non-medical subjects such as those in the humanities, social sciences and arts and culture. 228 Such interdisciplinary study gives medical students additional perspectives from which to reflect on their work and to use when interacting with patients.²²⁹ Medical humanities courses offer opportunities to sustain empathy throughout medical training; enhance the cultural competencies of doctors when working with diverse populations; and foster self-reflection amongst doctors themselves.²³⁰ Competencies gained through the study of, and engagement in, arts and culture assist the achievement of these ends particularly well.

Arts and Culture in the Medical Field

In many ways, arts and culture serve to enrich the practices of community healthcare professionals by strengthening their practical skills; raising their awareness of cultural issues; and introducing doctors to artists working in healthcare settings.²³¹ Visual arts help medical students hone their observational skills through the careful examination of paintings, as they do at the University of California at Los Angeles's medical school, where an artist-in-residence organizes art exhibits to correspond with what medical students are studying during a particular semester.²³² Using deductive reasoning, such students learn to pay attention to small details in order to identify what is ailing the subjects of paintings. When working with real patients, attention to the most minute of details can yield more accurate diagnosis.²³³ Technology enables artists to develop increasingly realistic models of organs such as the heart²³⁴ to supplement clinical training. Medical students learn patient-centered care by shadowing artists working with hospital patients, which enhances the students' understanding of the benefits that arts and artists can bring to healthcare settings, while also engaging doctors in the creation of arts and culture activities for their patients.²³⁵

Medical schools such as Cornell University's Weill Cornell Medical College, where students can earn dual degrees in music and medicine, are merging areas of study to increase the impact of humanities on medicine. ²³⁶ In addition, some schools are using music as a model for the study of medicine, emulating music's training structure of experiential learning and practice, the view of teachers as coaches rather than lecturers, the ensemble method of team communication and group performance and its emphasis on interpreting and applying basic techniques in different contexts. ²³⁷

Medical students derive valuable lessons from other arts and culture disciplines, as well. Wheelchair dance performances prompt discussions among first-year medical students about the nature of disability. Actors who serve as "standardized patients," portraying individuals suffering from a range of ailments, provide dramatic feedback on how well a medical student carried out his or her "exam." Literary skills help doctors practice narrative medicine, the art of learning from a patient's personal story by listening intently to what patients tell about themselves, and by enlisting "the listener's interior resources—memories, associations, curiosities, creativity, interpretive powers, allusions to other stories told by this teller and others—to identify meaning." When they become engaged in patient narratives, doctors learn more about a patient's history and can develop a deeper context for their clinical assessments and ultimate diagnosis. This results in better care for patients, but it also benefits medical students: Researchers in the Netherlands found that arts training reduced medical students' performance anxiety during examinations, presentations and training. Students also developed the ability to engage with and relate to people from diverse backgrounds. Line of the students and cultimate diagnosis.

In Ohio, this kind of training has been adopted by the Columbus Museum of Art and the Ohio State College of Medicine, which collaborated to introduce the Art of Analysis program to medical students. Through the program, trained art educators and docents from the museum teach students the "Observe, Describe, Interpret, and Prove" strategy to develop critical thinking processes. The program engenders empathy, builds team cohesion, increases students' tolerance for dealing with unexpected situations and sharpens observational skills.²⁴² In Cleveland, many

Through the Art of Analysis program, trained art educators and docents from the museum teach students the "Observe, Describe, Interpret, and Prove" strategy.

educational institutions have incorporated arts and culture into their medical curricula. For example, the Cleveland Clinic Lerner College of Medicine's Program in Medical Humanities allows medical students to explore the ethical, societal and historical dimensions of their work. Also, with the support of the Cleveland Foundation, the Clinic's Medical Humanities programs provide opportunities for medical students to work with local artists, academics and community leaders to construct stories of health and well-being in Cleveland.²⁴³ At Case Western Reserve University, medical students may take an elective course in music therapy and explore research on music and medicine with music therapists from University Hospitals.²⁴⁴ The Northeast Ohio Medical University (NEOMED) offers a Human Values in Medicine Program with a cultural studies orientation that allows students to identify inequities and injustices in the doctorpatient relationship, in medical training, and in

healthcare access and delivery in the United States.²⁴⁵ Hiram College's Center for Literature and Medicine offers programs that examine healthcare issues through the lenses of literary works and theatrical productions such as "Exploration of Diseases and Disorders by Performance: Autism," which was created by students to educate the public and raise awareness about Autism Spectrum Disorder.²⁴⁶ With the support of the Cleveland Clinic and the Summa Foundation, Kent State University's Wick Poetry Center and its student-led Glyphix design studio coordinate the Healing Stanzas Project, which encourages patients, caregivers and medical students to express their emotions through the creation of poems illustrated by Kent State graphic design students and displayed at locations throughout the region.²⁴⁷

Cleveland's arts and culture institutions also have a wealth of resources useful to the medical field. For example, the Cleveland Museum of Art's "Art to Go" program lets Case Western Reserve University medical students view objects from the museum's collection to help improve their diagnostic skills through observation, deduction and teamwork.²⁴⁸ The Cleveland Museum of Natural History's Hamann-Todd Human Osteological Collection contains over 3,000 modern human skeletons and is the largest, modern, documented human skeletal collection in the world, giving medical students a chance to hone their skills in anatomy, pathology and physiology.²⁴⁹ The Great Lakes Science Center, in partnership with Case Western Reserve University, has a BioMedTech exhibit that introduces methods of biomedical research and features a speaker series on which leading biomedical and engineering professionals present the latest advances in the medical field.²⁵⁰The Cleveland Institute of Art's biomedical art students help physicians and medical students better understand medical procedures by creating medical illustrations depicting procedures and ailments. Great Lakes Theater and the Baldwin Wallace University's Department of Theater and Dance have collaborated with the Cleveland Clinic and University Hospitals to offer educational workshops in 2012 for internal medicine residents, helping them develop better relationships with their patients and engage with diverse populations.²⁵¹ In addition, Great Lakes Theater's actors delivered a presentation at Cleveland's first Medical/Legal Summit in April 2013 that addressed the physician's role in framing conversations with patients and families through the development of "unscripted scenarios." Such activities are part of a larger trend called Medical Improv that unites theater and health in sessions where performers teach doctors improvisation techniques to strengthen emotional intelligence skills such as empathy, trust and self-awareness.

Doctors as Artists

As arts and culture activities play an increasingly significant role in medical education, it is not uncommon for practicing doctors to identify as artists themselves in one or both of two ways. This seems natural in light of the practice of medicine being identified by many as both science and art, ²⁵² a practice whose "structure for analyzing medical decision making," cannot by itself account for the "messy details, such as context, cost, convenience, and the values of the patient" in pursuing courses of action for a particular patient's case. ²⁵³ In the first way, they see themselves as artists of medicine, as doctors are required to balance their clinical knowledge of disease (science) with their ethical responsibility to meet the individual needs of their patient (interpretive art).

In the second way, some doctors view themselves literally as artists, reporting their direct engagement in artistic and creative practices for myriad purposes ranging from the examination of personal emotions that arise from their practice of medicine to the use of arts activities to

relieve stress and distract from job-related pressures.²⁵⁴ Art-making physicians are so many that, in Cleveland, paintings and glasswork by local doctors were displayed in an exhibition held by the North Coast Health Ministry and BAYarts called "Doctors within Borders."²⁵⁵

Whether they identify themselves as artists or not, doctors often apply their knowledge of the arts in the treatment of artistic patients. Those specializing in "performance arts medicine" focus on treating the specific needs of actors, dancers and musicians. Locally, the Cleveland Clinic's Medical Center for Performing Artists treats voice, hearing and neuromuscular disorders common in performing artists. ²⁵⁶ In addition, University Hospitals Music and Medicine Center focuses on the specific needs of musicians, who can suffer from hearing loss, breathing problems, memory loss and neuromuscular disorders. ²⁵⁷

Conclusion

Arts and culture enrich the medical training of doctors and this connection has been formally recognized through the development of medical humanities programs. In numerous ways, the skills of arts and culture are informing the practice of medicine and arts and culture organizations are increasingly serving as resources for the medical community. Cleveland has an opportunity to further promote partnerships between its arts and culture organizations and with the medical community to inform practices and encourage engagement by doctors in such activities.

case study devising healthy communities



Katherine Burke leading a session at Rainey Institute Photo courtesy of Katherine Burke

humanizing medical training

For a little while during his 2011-12 academic year, medical student Vincent Cruz stopped reading textbooks and played with clay, instead. But he wasn't neglecting his studies.

Cruz and a classmate were finding out how making art with clay helps brain-injured patients get better. The pair had already sat in on a number of sessions with the Art Therapy Studio's Traumatic Brain Injury clay-studio group, observing "the amazing ability of the human brain to 'rewire' - how the physical act of working with clay (using handeye coordination and motor skills) helped promote this process," he writes in a recent e-mail. "It also reminded us of the importance of self-esteem and expression through the arts ... to patients who otherwise are incapable of communicating their complex thoughts and feelings."

And that, in two sentences, is the entire point of the Program in Medical Humanities and its Devising Healthy Communities project for medical students at the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, where students are learning that the arts offer them a deeper way of understanding patients, communities, themselves and the health of all three.

"Arts are a democratizing force," says Martin Kohn.

Kohn, who has a Ph.D. in education, runs the Program in Medical Humanities of the Center for Ethics, Humanities and Spiritual Care. He believes that being a doctor means more than being a fact-driven scientist; it is important for medical professionals to understand not only their patients' humanity, but also their own. Kohn long ago recognized that the arts can be one of the keys to the personal meaning often locked

away in the name of objectivity.

To help data-swamped future doctors get in touch with the creative, cultural and emotional sides of human beings and recognize that those areas directly affect health, Kohn devised an arts-based qualitative-research experience for first-year med students in collaboration with Katherine Burke, an adjunct member of Kent State University's theater faculty. The idea is to give students opportunities to observe artists working with patients and other members of the community and see the effects of arts activity on people as well as the communities in which they live. They develop research and reporting skills in the process, write personal reflections and, at program's end, relate the story of that community-arts experience to others.

Burke describes the program as different from



Martin Kohn presenting on Devising Healthy Communities Photo by CPAC

other arts-based learning. "It's really an opportunity for the students to learn about Cleveland and find out what it means to be part of the community," she says.

It also helps students find their own voices, express their own feelings and share their own stories with the people around them, Burke explains: "The way in which one tells a story has a way of forming an identity" for both the storyteller and the community listening to him or her.

It also provides insights about the direct effects of the arts on health. As Cruz writes, observing the clay studio "was an important exercise to see how art in the community—

much like nursing homes, outpatient offices and rehab facilities — is integral to the well-being and recovery of patients weeks/months/years after leaving the hospital, since this is often difficult to appreciate when we are so focused on the immediate tasks of in-patient medicine."

For the 2013 program, 33 first-year students were divided into four groups to observe and report on the community work of one of these four professional artists: performance poet Katie Daley, who was working with the visually impaired at the Cleveland Sight Center; DJ Doc, a hip-hop artist who worked with young people on music and gardening at the Fresh Camp in Cleveland's Glenville neighborhood; Cleveland ceramics artist Angelica Pozo, who worked at Merrick House in Cleveland's Tremont neighborhood; and Burke herself, who brought theater activities to University Settlement in Cleveland's Slavic Village.

Kohn's commitment to helping members of medical communities express themselves goes back to his early years at Northeast Ohio Medical University, where he founded an innovative poetry contest named after William

Carlos Williams, a famous American poet and a doctor.

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profound – of their
chosen profession.

But it wasn't until he had co-founded and begun co-directing the Center for Literature in Medicine at Northeast Ohio's Hiram College that he had a real epiphany about arts and medicine. He had started collaborating with the then-named Great Lakes Theater Festival, working with theater artists on a narrative bioethics program and "It just opened up my world," he said. Soon, Kohn was connecting med students with

Center for Ethics, Humanities & Spiritual Care

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performers, authors and, after his move to the Clinic, with the whole spectrum of culture, from episodes of "Scrubs" to half-day workshops at the Cleveland Museum of Art. In this way, his Medical Humanities program has sought to help students reflect on their identity, their role in society and larger cultural patterns as they face the issues – mundane and profound – of their chosen profession.

Kohn's approach helps turn a young doctor like Bryan Sisk into a different type of physician: one who is not only a scientist, but a human being, as well.

"Patients want doctors who aren't robots," said Sisk, a former Lerner College student now back in his Missouri hometown for a pediatric residency at St. Louis Children's Hospital/Washington University School of Medicine. He found that the group writing exercises, thought-provoking speakers and the wide range of arts and media that made up his training in humanities at Lerner have given him the ability to cope better with his patients' feelings and his own.

"Having the tools to fall back on and center yourself" is a big help, Sisk said. "I feel stresses have been minimized by the training I've had. I feel better off."





Left: DJ Doc's (pictured) session at Famicos Foundation Right: Rainey Institute Photos courtesy of Katherine Burke

Best Practices for Arts and Health Programs

Several common themes of successful programs have emerged from this white paper's exploration of arts and health. The following best practices are important considerations when developing and implementing programs that bring together the arts and culture and the health and human services sectors:

- Understanding context. Before embarking on an arts and health program, it is essential for
 all parties involved to develop a solid understanding of what populations will be served, what
 their specific needs are and what available resources exist for implementing the program. It
 is essential that arts and culture practitioners recognize the unique strengths, challenges and
 backgrounds of each participant, as well as the resources and limitations of each healthcare
 setting.
- Funding the intersection. Funding arts and health programs can be challenging in light of
 lower levels of available philanthropic support, limitations on what types of activities are
 covered by insurance, and rising healthcare costs. The formation of strategic alliances can
 help broaden the base of philanthropic support, while research can provide evidence that
 documents the medical costs savings and other benefits associated with such interventions.
- Addressing accessibility issues. In order to achieve full integration of, and participation in, arts and health activities, it is important to consider barriers to access. Such barriers can be perceptual. For example, artists who are not trained expressive arts therapists may not know how to get involved in healthcare facilities, healthcare providers might have preconceived ideas about the nature of arts and culture activities and patients may think they are not skilled enough to participate. Additionally, practical barriers may include difficulty traveling to arts and health programs, lack of funding for programs and inadequate space to carry out programs.
- Managing partnerships. Collaborations can yield numerous benefits such as the sharing of expertise, access to resources and greater efficiency and effectiveness of service delivery. When the arts and health fields intersect, partnership offers a way to further humanize healthcare settings and empower patients to share their stories and interact with others in different ways. As with any collaboration, success is achievable only when the parties involved communicate regularly, set clear and measurable goals and delineate expectations. Populations being served should also be given opportunities to share their experiences and talk about what best meets their needs.
- Disseminating research. The collection and dissemination of verifiable, high-quality data are essential to bolstering the case for continued integration of the arts and culture and health and human services sectors. The most powerful accounts meld quantitative data into a patient's personal journey. In this way, the patient's story humanizes the numbers in data tables, while the data tables can lend verifiability to the intrinsic values of arts and culture experience.

- Educating the public, healthcare professionals and artists about the intersection. In order to foster and strengthen the intersection between arts and health, it is essential for arts and health stakeholders to be given opportunities to share their experiences and educate others about the different ways arts and health intersect. Since the intersection runs along a continuum that varies according to factors such as engagement, programmatic structure and goals, it is important to think about arts and health definitions broadly to invite new avenues for participation.
- e Ensuring the safety of all participants. When introducing arts and culture into healthcare settings, strategies to ensure the maintenance of sterile environments are essential to protecting the safety of patients. For artists, gaining a shared understanding with healthcare providers during the development of arts and health projects can allow them to customize programming to meet the special needs of patients and understand how to best engage them in arts and culture activities. Conversely, for healthcare providers who are inviting artists to do work in their facilities, orientation sessions can be useful because artists' levels of clinical experience with patients may vary. Such training can include primers on privacy requirements, workplace safety regulations, management of emotionally challenging situations and working with different populations.

Recommendations for Future Policy

The health and human services sector provides assistance to people from all backgrounds at some of the most defining moments of their lives. This white paper has highlighted four overarching views of how arts and culture intersect with the health and human services field: through arts and culture integration in healthcare environments; direct patient engagement in arts and culture activities; community-based, arts and culture projects that address public health issues; and the incorporation of arts and culture in medical curricula. This paper has also shown a breadth of examples of what is happening between the arts and health fields in Cleveland. While not exhaustive, this white paper's goal was to define and identify a sampling of the strong body of work that is resulting from collaboration among the wealth of local arts and health assets.

While Cleveland's legacy as an industrial city has left it with significant challenges, it is also responsible for giving the city key assets that are defining its future. The intersections of its arts and culture assets and health and human services institutions are driving innovative partnerships that are positively affecting the well-being of individuals, as well as the health of the broader place they call home. In order to foster the arts and health connection, a number of policy issues merit consideration:

Research. Greater attention must be given to the valuable contributions arts and culture
provide to the health and human services field. Through the design of research studies that
quantify both the individual and public benefits of the intersection, practitioners will be
positioned to teach others that arts and culture activities are not simply entertainment or
something that is "nice to have," but are an essential and necessary element of true patientcentered care and recovery.

- Communications. All events and activities that illustrate the arts and health intersection must be promoted publicly through outreach to media outlets, medical practitioners and caregivers who may not be fully aware of the intersection's value. Such outreach will further demonstrate the powerful momentum in Cleveland that is uniting the arts and health fields.
- Networking opportunities. Opportunities for practitioners to network, share research and discuss best practices must also be frequently organized and made open to all, from those already doing arts and health work to those who are looking to get involved. By uniting the arts and health sectors, greater attention can be called to the specific needs facing practitioners of arts and health as well as to possible strategies for addressing them. Such networking will also help the arts and health field build a united force through which common cause issues can be addressed.
- Funding. Funding should focus on supporting the full design, implementation and evaluation of arts and health programming. In addition, strategies to further validate arts and health activities as medical practice, such as the development of state licensures for art and music therapists, can be explored as avenues for obtaining recognition and reimbursements from insurance sources.
- Educational opportunities. The development of local, formalized educational programs, such as the University of Florida's Certificate in Arts in Medicine or Certificate in Arts in Public Health, ²⁵⁸ can help bolster expertise in the work of the arts and health field. It is also important for colleges and universities to make opportunities available to students from diverse academic backgrounds to learn about creative intersections and the roles their specialized knowledge can play in the arts industry. Conversely, for students studying arts and culture-related subjects, employment opportunities in sectors such as health and human services and community development should also be promoted.

By using these strategies to reinforce existing intersections, Cleveland has the ability to capitalize further on its wealth of arts and culture and health and human services assets. While Cleveland is already widely celebrated for the merits of these local sectors individually, it has a unique opportunity to become the undisputed leader of arts and health partnerships that exist at the place where creativity and well-being meet.

Conclusion Creative Minds in Medicine

At this juncture, returning to the World Health Organization's definition of health is useful -"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." In thinking about health in this holistic way, the interdependence between community health and individual health becomes clearer. The health of a place is beholden to factors that span the economic, educational, social and environmental needs of the people living there. Satisfying such conditions is one essential element to improving the health of a city and consequently laying the foundation for supporting individual health. However, this is only one side of the equation, because the health needs of each individual are unique to that person's life experiences and the point where they stand on their personal health journey. Personal experiences ultimately drive health needs, which in turn define what factors of place are needed to meet those needs. The ability of arts and culture to draw connections to a particular place, unite communities and mobilize individuals in support of common causes directly affects community health. Similarly, the ability of arts and culture to foster creativity, inspire reflection and draw out an individual's interpretation of his or her world directly influence personal health and well-being. Arts' and health's common impact on both the community and the individual is the clear point from which their intersection grows.

Yet, on a deeper level, the arts and health intersection also grows from the inherent creativity that lives within the mind of every person. It lives in the doctor who is conducting clinical research in pursuit of a new treatment. It lives in the artist who engages others in the process of self-discovery. It lives in patients and their caregivers who are trying to make sense of a diagnosis. The creative process ignites our passions, drives our perspectives of the world, and pushes us to challenge accepted conventions. In the end, the arts and health intersection is founded on the use of creativity to gain insights about what it is to be human – to experience life from birth to death. This shared purpose is what ultimately eases the tension between art and science, as each offers a different, but inseparable, path to improving the conditions inherent to our common humanity.

Case study Billy Bear's Honey Chase



Billy Bear's Honey Chase Main Menu Screen capture courtesy of the Cleveland Institute of Art

designing for the future

The words "computer game" may mean pretty much the same thing as "lurid murder" to a lot of people. Nearly all screen games seem to involve bloody, nonstop shootings, beatings or explosions, usually carried out with high-tech metal weapons the size of Godzilla.

Amanda Almon has gotten tired of that. The Cleveland Institute of Art Associate Professor of Biomedical Art and Chair of the Game Design program makes a point now of encouraging her students to design nonviolent entertainments. She's even started revising the curriculum standards for the program to encourage courses focused on Games for Change, aiming for game design that promotes learning instead of virtual violence.

So when Jared Bendis, Co-Owner of the app development company Lemming Labs Limited, needed an artist to design the images for an application that teaches sick children how to manage their pain, Almon came to mind faster than a wand comes to hand in a Harry Potter game.

Bendis calls her an amazing illustrator who "came in and added the flavor" to the game app, a task that perfectly married the skills and benefits of art with the goals of community health.

What the app needed first was a metaphor, explains Bendis, manager/designer for the project. Because its purpose is to teach young children timing and strategy in the context of their pain management — to develop a sense of timing and understand the nature of how best to plan and use any relief that can be afforded — the game had to have a premise that paralleled the situations and decisions children would need to face, but did so in an appealing, entertaining way.

Bendis and the app team thought up just the thing: a little cartoon-bear hero named Billy who must evade a bunch of bees to get to the honey pots they guard. Drawn in bright colors by Almon, with funny expressions and actions, Billy and the bees invite kids into a cheerful, understandable place where conflict is mild and comical and vying for the prize feels exciting, but not scary.

Once the app team knew what the game would be about and how it would work, Almon created sketches of the characters, props such as Billy's shield, and backdrops, as well as all title screens. While she developed the art, Bendis built the computer program using temporary pictures that he replaced with Almon's images as she completed them. Then they had to test the game to make sure it worked properly and to make sure they hadn't left out any features or functions.

The amounts of imagery and possible actions had to be just right. "There's a fine balance between adding too much and too little," Almon points out.

In addition, the game operations had to be age-appropriate, she says. Because young

children have less eye-hand coordination than older ones, the game needed simple controls: Players merely tilt the screen to move Billy Bear around the bees, somewhat in the same way that players of the classic game Labyrinth tilt a wooden board to move a marble through a maze. The goal is to collect a lot of honey pots without losing stepping stones.

Almon and Bendis did not want the game to be violent or upsetting in any way, but knew it would have to offer challenges, setbacks and rewards if it were to be interesting for kids to play. So when a player lets Billy Bear bump against a bee, the bee buzzes, but Billy doesn't get stung – instead, he gets stuck in the honey and loses stepping stones.

Nothing dies: If Billy Bear loses too many stones, he just ends up at home.

Getting around the bees takes skill, but players have a special power: When they really, truly need to use it, they can press a button and become temporarily immune to the bees, giving them and Billy a chance to move through the swarm without penalty. But they have to take into account that once they use the power, it can't be used again for a while.

Billy Bear teaches judgment. But most important, it's fun and kids – sick or well – like it.

When players decide that they need to use the special power, they press a green, glowing button that Almon has designed to look exactly like the buttons on the pain management machine.

With choices such as these, Almon and the app team have created an experience about cute, age-appropriate characters through whom children can test their abilities enjoyably. Though the little players' gaming mistakes do have consequences — an important learning theme — they can make them without the psychological threat of suffering anything really frightening, notes Bendis.

Billy Bear teaches judgment. But most important, it's fun and kids – sick or well – like it. It may also be creating an industry: Bendis says the game has won interest from other members of the local medical community who are starting to understand that scientific goals can be achieved more effectively through interactive and incentive based learning. "Once we had the one app, we started getting inquiries for more," he says. "Once their eyes are opened, they see the value in it."

He believes that art performs a critical role in health care. When esoteric knowledge needs to be imparted, "art can translate," Bendis says. "It gives you the opportunity to streamline and simplify an idea. Art allows us to direct attention and tap into emotion."

So much in the medical field is about fear, and biomedical art (appropriate to the target

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audience) can change that, he thinks. Kids are drawn to the Billy Bear game because his cuteness taps a part of the human brain that triggers good feelings. "How do you get them to want to play?" he asks. "The art is what brings them to it."

Almon sees therapies of the Billy Bear sort as the future of biomedical art and of young artists like her students at CIA. She notices that doctors who were once content with a line drawing now want fully rendered, digital drawings and 3D interactive images because they want clarity and visual impact on their patients and colleagues.

Such apps may also be the future of arts-related therapies and patient education, says Billy Bear team member Anne Stormorken, a University Hospitals critical-care pediatrician. Though a pain-management app is a brand-new concept, it's logical that children could learn this way, she says. "Kids don't learn from adults talking at them."

Even without the learning, Billy Bear – like other arts therapies and health education materials – are bound to make little patients feel better. Says Stormorken, "Any game that they play, any distraction, has been shown to help manage pain."



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Creative Minds in Medicine

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appendix A

list of organizations referenced in Creative Minds in Medicine

This list contains the names of organizations located in, or within the vicinity of, Northeast Ohio that were referenced in the white paper as being involved in the arts and health intersection. CPAC recognizes that this list and white paper only provide an arts and health sampling, and are by no means exhaustive of all of the arts and health-oriented work happening our region.

- A Cultural Exchange
- Access to the Arts
- Alzheimer's Association Cleveland Chapter
- · American Greetings
- Art House Inc.
- Art Sparks
- Art Therapy Studio
- Arts Collinwood
- Baldwin Wallace University
- BAYarts
- Beck Center for the Arts
- Beech Brook
- · Benjamin Rose Institute
- Bennett Adelson
- CardioInsight
- Care Alliance Health Center
- Case Western Reserve University
- Cavani String Quartet
- · Center for Arts-Inspired Learning
- · Center for Families and Children
- · Centers for Dialysis Care
- Chagrin Arts
- Chagrin Valley Little Theatre
- The Children's Museum of Cleveland
- · City of Cleveland
- Cleveland Botanical Garden
- The Cleveland Clinic
- · Cleveland Department of Public Health
- Cleveland Institute of Art
- · Cleveland Institute of Music
- Cleveland International Film Festival
- Cleveland International Piano Competition
- Cleveland Museum of Art
- · Cleveland Museum of Natural History
- Cleveland Music Therapy Consortium
- Cleveland Orchestra
- · Cleveland Play House
- · Cleveland Public Library
- Cleveland Public Theatre
- Cleveland Rape Crisis Center
- · Cleveland Sight Center
- Cleveland State University
- Cleveland Women's Orchestra
- Cornerstone of Hope
- Cuyahoga County Board of Developmental Disabilities
- Cuyahoga County Office of Early Childhood/Invest in Children
- Dance for Parkinson's Disease (PD)

- DANCECleveland
- Dancing Wheels
- · District of Design
- Downs Designs
- East Cleveland Township Cemetery
- Eliza Bryant Village
- Eliza Jennings
- Fairhill Partners
- Farm Product Development
- Fatima Family Center
- Fine Arts Association
- The FRESH Camp
- The Gathering Place
- Geauga County Board of Developmental Disabilities
- Global Center for Health Innovation
- Glyphix Design Studio at Kent State University
- Golden Age Centers
- Great Lake Science Center
- Great Lakes Theater
- GroundWorks Dance Theater
- Guitars for Vets
- Hamlet Retirement Village
- Hattie Larlham
- Head Start
- · HeArtworks Gallery and Gifts
- Hiram College
- Hospice of the Western Reserve
- ideastream
- Infectious Disease (ID) Alliance of CWRU
- Inlet Dance Theatre
- Jewish Family Service Association of Cleveland
- Iudson Retirement Communities
- Karamu House
- Kent State University
- Kindred Care at the Greens of Lyndhurst
- Lake Hospital System
- LAND Studio
- · Lemming Labs Limited
- LGBT Community Center of Greater Cleveland
- LogicJunction, Inc.
- Louis Stokes Cleveland VA Medical Center
- Malachi House
- Mandel Jewish Community Center
- Mayfield Village Department of Recreation

- McGregor
- Menorah Park
- Merrick House
- Metrohealth Medical Center
- MorrisonDance
- Museum of Contemporary Art (MOCA)
 Cleveland
- The Music Settlement
- Musicians on Call
- North Coast Health Ministry
- Northeast Ohio Medical University (NEOMED)
- Nottingham Spirk
- Ohio Buckeye Chapter of the National MS Society
- Ohio City Writers
- Ohio Philharmonic Orchestra
- Parma Hospital
- The Plain Dealer, NetWellness
- Rid-All Green Partnership
- River's Edge at the St. Joseph Center
- Rock and Roll Hall of Fame and Museum
- Roots of American Music
- Rust Belt Welders
- The Salvation Army
- The Sculpture Center
- SignStage Theatre at Cleveland Hearing and Speech Center
- Sisters of Charity Health System
- Slavic Village Development
- SmartShape
- Solon Center for the Arts
- Solutions at Work (SAW, Inc.)
- Summa Health System
- Temple-Tifereth Israel
- TimeSlips
- United Cerebral Palsy of Greater Cleveland
- University Circle Inc.
- . University Chicle in
- University HospitalsUniversity Settlement
- Ursuline ArtSpace
- Ursuline College
- Verb BalletsVerlezza Dance
- Very Special Arts (VSA) Ohio Cleveland Chapter
- Vocon
- Western Reserve Historical Society
- Westlake High School
- WKYC Channel 3

About the Community Partnership for Arts and Culture

CPAC is a nonprofit with a mission to strengthen, unify and connect greater Cleveland's arts and culture. Research is a core component of our work, and one of many ways we support arts and culture. CPAC provides counsel related to public policy that benefits the sector and the broader community. It provides a number of tools through cultureforward.org and mycreativecompass.org for arts and culture professionals and those who would like to engage with them. CPAC also carries out a variety of programs and services that help build the sector's organizational and business practices to support a vibrant, thriving greater Cleveland. www.cultureforward.org

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