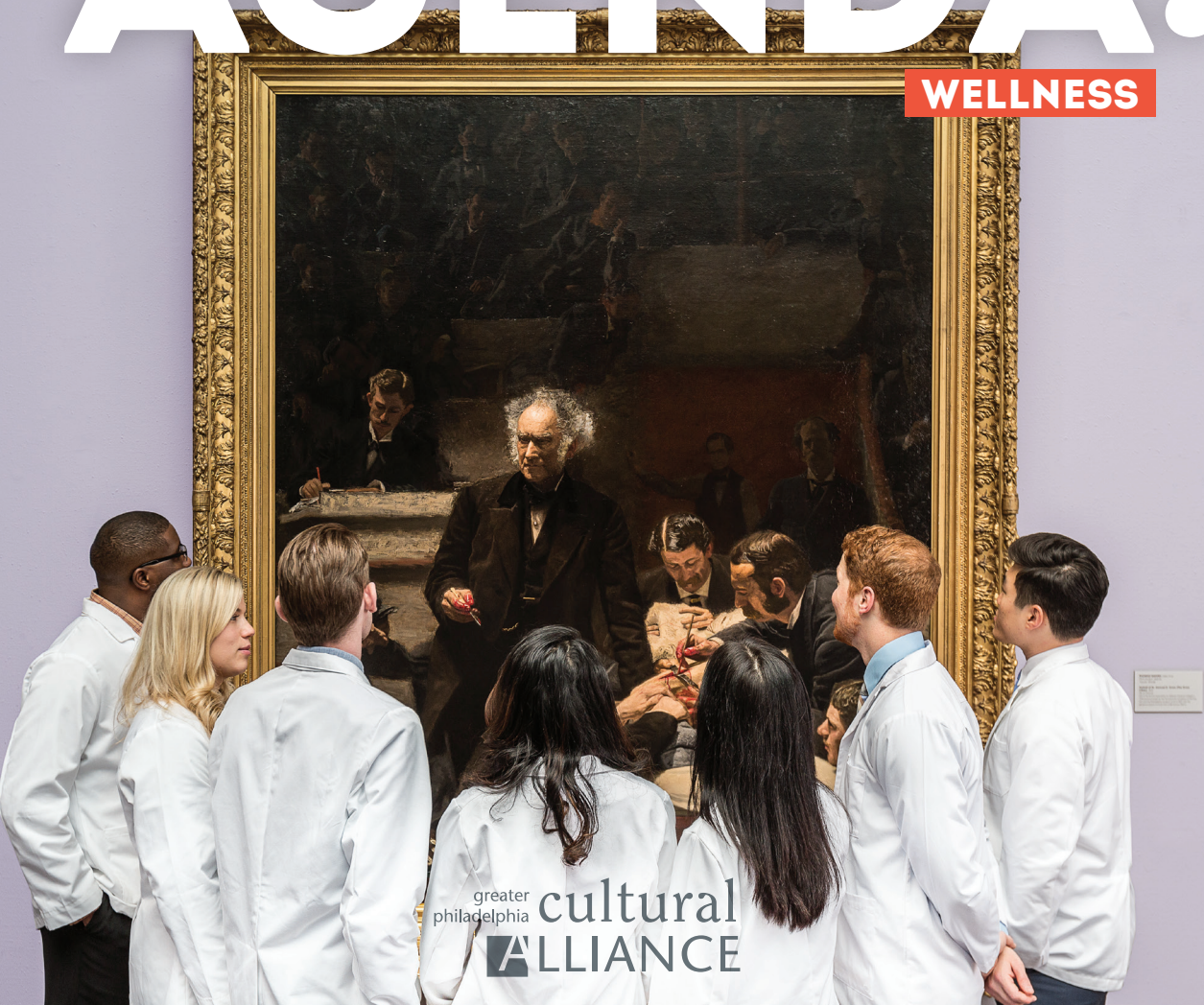


THE IMPACT OF ARTS AND CULTURE

AGENDA:

WELLNESS



greater
philadelphia cultural
ALLIANCE

SUMMARY

Medicine is a science. Making medicine better is an art.

Educating doctors through the arts is an emerging practice that gets to the root of healthcare: improving doctors' diagnostic abilities and helping physicians fight their own burnout. This practice, which can impact future physicians as early as their first year of medical school, has been proven to enhance patient care. Patients treated by arts-educated doctors and receiving arts-integrated care have measurably better outcomes.

Greater Philadelphia excels both in the education of doctors and the treatment of patients. **Agenda: Wellness** is at the intersection of groundbreaking

advances in medicine and the region's world-class arts and culture sector. It's the connection of these legacies — from Thomas Eakins' 19th-century painting *The Gross Clinic*, pictured on the cover, to today's arts-infused medical curriculum — that raises the improvement of medicine, medical education and patient outcomes to an art form.

The Agenda series highlights existing research and resources that demonstrate the relevance and impact that arts and culture has in Greater Philadelphia, throughout the Commonwealth and across the country.



“The humanities are not only a way to teach compassion and tolerance, but also represent the wisdom of those who came before us.”

Photograph by Steve Belkowitz.

IMPACT: ADVANCING PATIENT CARE

A study by Jefferson University’s Salvatore Mangione, MD reveals the positive impact of arts and culture on medical students. Exposure to music, literature, theater, visual arts and other cultural activities results in **significant increases in empathy, wisdom, confidence in their abilities, emotional intelligence and visual-spatial skills**, which correlate to improved medical practice and better patient care.

As a result, **Jefferson University and Lantern Theater Company partner to use theater to foster empathy in medical students and health professionals.** Participants in the workshops draw on performance techniques and writing exercises that they then use to better see patient perspectives and engage with peers. A final, live performance is presented by Jefferson students and Lantern artists.

Source: Mangione, S., et al., *Medical Students’ Exposure to the Humanities Correlates with Positive Personal Qualities and Reduced Burnout: a Multi-Institutional U.S. Survey.*

IMPACT: IMPROVING DIAGNOSIS

Researchers from the University of Pennsylvania and Children's Hospital of Philadelphia found that students who took a six-part course in fine-art observation significantly improved their clinical observation skills.

Medical students who participated in the study, which took place at the Philadelphia Museum of Art, showed a 26% increase in diagnostic and observation abilities.¹

A quick and correct diagnosis saves lives, speeds recovery and reduces healthcare costs.²

Hands-on and “eyes-on” exercises are part of the curriculum presented at the Pennsylvania Academy of the Fine Arts for medical students and practicing physicians at Jefferson University, Drexel University College of Medicine and Cooper Medical School at Rowan University. Improving observational skills through “visual literacy” enhances doctors’ and students’ abilities to differentiate between similar conditions, as well as to identify the changes caused by a syndrome or disease, in order to make the correct diagnosis.

FINE-ART OBSERVATION
RESULTS IN A

26%
increase

IN DIAGNOSTIC AND
OBSERVATION ABILITIES



Photograph by Ed Cunicelli, courtesy of
Paoli Hospital Foundation.

“Art training may be particularly helpful in specialties where diagnosis and treatment are based primarily on direct observation, such as ophthalmology, dermatology and radiology.”

¹ Gurwin, J., *A Randomized Controlled Study of Art Observation Training to Improve Medical Student Ophthalmology Skills.*

² Khullar, D., *Reducing Diagnostic Errors — Why Now?*

IMPACT: FIGHTING BURNOUT

Just as art improves empathy, confidence and wisdom among physicians and medical students, it also helps reduce the symptoms of burnout that are prevalent in the healthcare industry.¹ Medical students entering their residencies experience an average increase in depression symptoms of more than 15%,² and the rate of suicide among physicians is higher than any other occupation.³

Arts and culture gives doctors “emotional resilience, humility, mindfulness and humor.”¹



Photograph by Betsy Manning,
courtesy of Temple University.

◀ At the Lewis Katz School of Medicine at Temple University, the Narrative Medicine program seeks to “focus on the human side of medicine” by integrating storytelling and reflection into the curriculum. **Students and faculty participate in Narrative Medicine Story Slams**, reflecting on lessons learned and interactions with patients as a way to share and process personal and professional experiences.

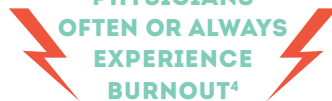
80%

OF PRACTICING
PHYSICIANS
REPORT BEING
AT OR BEYOND
CAPACITY



49%

OF PRACTICING
PHYSICIANS
OFTEN OR ALWAYS
EXPERIENCE
BURNOUT⁴



1 Mangione, S., et al. *Medical Students' Exposure to the Humanities Correlates with Positive Personal Qualities and Reduced Burnout: a Multi-Institutional U.S. Survey.*

2 Mata, D.A., *Prevalence of Depression and Depressive Symptoms Among Resident Physicians – A Systematic Review and Meta-Analysis.*

3 Agerbo, E., *Suicide and Occupation: the Impact of Socio-Economic, Demographic and Psychiatric Differences.*

4 Physicians Foundation, *2016 Survey of America's Physicians: Practice Patterns and Perspectives.*

RESEARCH

ART MAKES THE DIFFERENCE:

Art intervention — arts-based therapies as well as the presence of art in public spaces and permanent galleries inside hospitals — results in:



**SHORTER
HOSPITAL STAYS²**



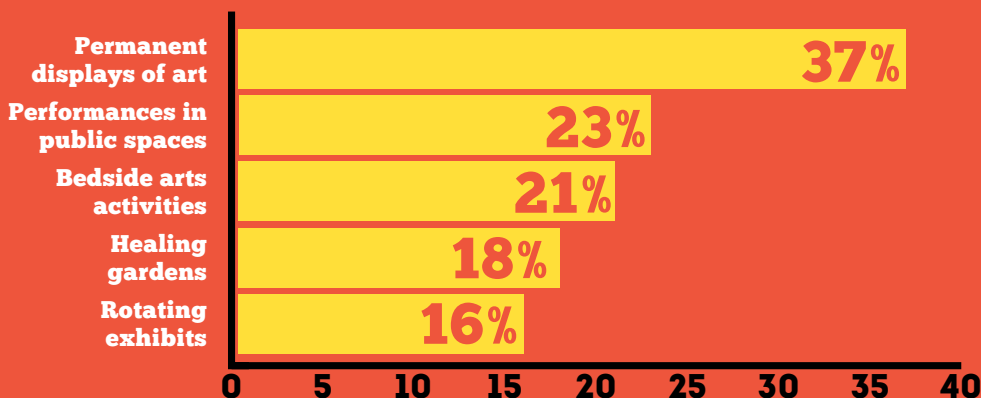
MORE INFORMATION, CITATIONS + RESOURCES ► [PHILACULTURE.ORG/WELLNESS](https://philaculture.org/wellness)

1 Staricoff, RL., *Arts in Health: the Value of Evaluation*.

2 Kreitzer M., Snyder M. *Healing the Heart: Integrating Complementary Therapies and Healing Practices into the Care of Cardiovascular Patients*.

3 Ulrich, R., Lunden, O., Eltinge, J., *Effects of Exposure to Nature and Abstract Pictures on Patients Recovering from Open Heart Surgery*.

ARTS, HEALTH & HOSPITALS: MOST COMMON WAYS HOSPITALS SUCCESSFULLY INTEGRATE ART INTO PATIENT CARE



Source: *State of the Field Report: Arts in Healthcare 2009*. Washington, DC: Society for the Arts in Healthcare.

The Greater Philadelphia Cultural Alliance would like to thank its project partners and advisory committee members, including: Patrick Auth, PhD, Drexel University; Adrian S. Banning, MMS, Drexel University; Peter Danzig, Theatrical Trainer; Horace M. DeLisser, MD, Perelman School of Medicine, University of Pennsylvania; Carmen Febo-San Miguel, MD, Taller Puertorriqueño; Sherry W. Goodill, PhD, College of Nursing and Health Professions, Drexel University; Denise LaMarra, MS, Perelman School of Medicine, University of Pennsylvania; Aaron Levy, Slought Foundation/University of Pennsylvania; Salvatore Mangione, MD, Sidney Kimmel Medical College, Thomas Jefferson University; Eri Millrod, Drexel University; Donna Radl, PhD, Paoli Hospital, Main Line Health; Jill Sonke, University of Florida Center for Arts in Medicine; Amy P. Troyano, MA, Children's Hospital of Philadelphia; and Michael Vitez, Lewis Katz School of Medicine at Temple University. The Cultural Alliance also thanks Megan Voeller, Sidney Kimmel Medical College, Thomas Jefferson University, who supplied valuable resources, input and guidance.

Published by The Greater Philadelphia Cultural Alliance, Maud Lyon, President

Lead Author: Anne Marie Rhoades, Vice President of Advocacy & Strategic Partnerships

Project Direction: Michael Norris, Chief Strategy Officer

Kristen Vinh, Strategic Communications Manager

Design: SWELL

PROJECT PARTNERS

**LANTERN
THEATER
COMPANY**

PAFA
Pennsylvania Academy
of the Fine Arts

Philadelphia
Museum of
Art



LEAD SPONSOR



Independence
*f*oundation

SPONSOR



Jefferson

HOME OF SIDNEY KIMMEL MEDICAL COLLEGE

**WITH ADDITIONAL FINANCIAL SUPPORT FROM
THE DOLFINGER-MCMAHON FOUNDATION, THE LIDA FOUNDATION,
BRIAN AND SHERRY EFFRON AND THE CIVIC FOUNDATION**

COMMUNITY PARTNERS



The College of Physicians of Philadelphia
BIRTHPLACE OF AMERICAN MEDICINE®



HAP
The Hospital + Healthsystem
Association of Pennsylvania



**PUBLIC
HEALTH**
management
corporation

CIVIC PARTNER



**Department of
Public Health**
CITY OF PHILADELPHIA

Photograph by Ed Cunicelli, courtesy of Paoli Hospital Foundation. FRONT PANEL: Photograph by Steve Belkowitz; The Gross Clinic courtesy of the Pennsylvania Academy of the Fine Arts, Philadelphia. Gift of the Alumni Association to Jefferson Medical College in 1878 and purchased by the Pennsylvania Academy of the Fine Arts and the Philadelphia Museum of Art in 2007 with the generous support of more than 3,400 donors.