Medical Professionalism Best Practices:

Leadership and Professionalism in Times of Crisis

Edited by
Richard L. Byyny, MD, FACP
Douglas S. Paauw, MD, MACP
Sheryl A. Pfeil, MD

2022
Alpha Omega Alpha Honor Medical Society
Aurora, Colorado

Medical Professionalism Best Practices:

Leadership and Professionalism in Times of Crisis

Edited by

Richard L. Byyny, MD, FACP
Douglas S. Paauw, MD, MACP
Sheryl A. Pfeil, MD

2022
Alpha Omega Alpha Honor Medical Society

Dedicated to the members of Alpha Omega Alpha Honor Medical Society and the medical profession.

ISBN: 979-8-218-06551-5

Table of Contents

Contributors

Richard L. Byyny, MD, FACP (AΩA, Keck School of Medicine of the University of Southern California, 1964) is Executive Director of Alpha Omega Alpha Honor Medical Society, and Editor of *The Pharos*. Contact Dr. Byyny at: Alpha Omega Alpha, 12635 E. Montview Blvd., Suite 270, Aurora, CO 80045; r.byyny@alphaomegaalpha.org.

Dawn DeWitt, MD, MSc, CMedEd, MACP, FRACP, FRCP-London (AΩA, University of Washington School of Medicine, 2002, Faculty) is Professor & Senior Associate Dean, CIPHERS (an initiative to facilitate scholarship, research, and mentorship related to health professions education), Washington State University Elson S. Floyd College of Medicine. Contact Dr. DeWitt at dawn.dewitt@wsu.edu.

Kaufi Dzirasa, MD, PhD is the Primary Investigator at the Laboratory for Psychiatric Neuroengineering, the K. Ranga Rama Krishnan Associate Professor, Associate Professor of Psychiatry and Behavioral Sciences, Assistant Professor Biomedical Engineering, Associate Professor in Neurobiology, Associate Professor in Neurosurgery, and Investigator in the Duke Institute for Brain Sciences at Duke University. Contact Dr. Dzirasa at kaufi.dzirasa@duke.edu.

Kellie Engle is Director of Curriculum at the University of Washington School of Medicine. Contact Ms. Engle at kaengle@uw.edu.

Emily D. Geyer, MD (AΩA, The Ohio State University College of Medicine, 2021) is a first-year Emergency Medicine Resident Physician in Georgia. She recently received a National Outstanding Medical Student Award from the American College of Emergency Physicians. Contact Dr. Geyer at edgeyer@emory.edu.

Céline R. Gounder, MD, ScM, FIDSA (AΩA, University of Washington, 2004), is a Clinical Associate Professor of Medicine and Infectious Diseases, at the New York University Grossman School of Medicine and Bellevue Hospital Center, and a Senior Fellow and Editor-at-Large for Public Health at the Kaiser Family Foundation and Kaiser Health News. She is also a CBS News contributor.. Contact Dr. Gounder at CelineG@kff.org.

Oluwaferanmi Okanlami, MD, MS (AΩA, University of Michigan Medical School, 2019, Faculty) is Assistant Professor of Family Medicine, Physical Medicine and Rehabilitation, and Urology; Director, Student Accessibility and Accommodation Services; Director, Services for Students with Disabilities; Director, Testing Accommodation Centers; Director, Adaptive Sports and Fitness; and Adjunct Assistant Professor of Orthopaedic Surgery, David Geffen School of Medicine, University of California, Los Angeles. Contact Dr. Okanlami at Okanlami@med.umich.edu.

Douglas S. Paauw, MD, MACP (AΩA, University of Michigan, 1983) is Professor of Medicine, Rathman Family Foundation Endowed Chair in Patient-centered Clinical Education, and Clerkship Director for the Department of Medicine at the University of Washington School of Medicine. Dr. Paauw is Co-chair of the AΩA Professionalism Committee. Contact Dr. Paauw at: University of Washington School of Medicine, Department of Internal Medicine, Box 356420, 1959 NE Pacific St., Seattle, WA 98195-6420; dpaauw@medicine.washington.edu.

Harold L. Paz, MD, MS (AΩA, The Ohio State University College of Medicine, 2020, Faculty) is Executive Vice President for Health Sciences at Stony Brook University. Contact Dr. Paz at Stony Brook Medicine, 101 Nicolls Road, Stony Brook, NY 11794; drhpaz@gmail.com.

Sheryl A. Pfeil, MD (AΩA, The Ohio State University College of Medicine, 1984) is Professor of Clinical Medicine; and Medical Director, Clinical Skills Education and Assessment Center, The Ohio State University College of Medicine and Wexner Medical Center. Dr. Pfeil is Co-chair of the AΩA Professionalism Committee. Contact Dr. Pfeil at: The Ohio State University, Division of Gastroenterology, Hepatology, and Nutrition, 395 West 12th Ave., Suite 200, Columbus, OH 43210; Sheryl.pfeil@osumc.edu.

Alfred (Fred) Sanfilippo, MD, PhD, (AΩA, Duke University School of Medicine, 1987, Alumnus) is Director, Emory-Georgia Tech Healthcare Innovation Program. Contact Dr. Sanfilippo at fred.sanfilippo@emory.edu.

Y. Ki Shin, MD (AΩA, University of Washington School of Medicine, 1996, Resident), is a private practice internal medicine specialist in Montesano, WA. Contact Dr. Shin at shiny@uw.edu.

David J. Skorton, MD (AΩA, Northwestern University Feinberg School of Medicine, 2020, Alumnus) is the President and CEO of the Association of American Medical Colleges. Contact Dr. Skorton at djskorton@aamc.org.

Elizabeth A. Stein, MD is a first-year Internal Medicine-Pediatrics resident at University of Colorado Anschutz Medical Campus. She is a member of the Gold Humanism Honor Society and received the Husky 100 Award for her leadership, public service, and contributions to the University of Washington. Contact Dr. Stein at elizabeth.stein@CUAnschutz.edu.

George E. Thibault, MD (AΩA, Harvard Medical School, 1968) is Immediate Past President of the Josiah Macy Jr. Foundation; and Daniel D. Federman Professor of Medicine and Medical Education, Emeritus, Harvard Medical School. Contact Dr. Thibault at: gthibaultmd@outlook.com.

Jeffrey Wallace, MD, MPH/MSD (AΩA, University of Michigan Medical School, 1982) is a Geriatrician at the University of Colorado Anschutz Medical Campus. Contact Dr. Wallace at jeff.wallace@cuanschutz.edu.

Mark Whipple, MD, MS (AΩA, University of Washington School of Medicine, 1991) is Associate Dean for Curriculum, and Professor, Otolaryngology-Head and Neck Surgery; Professor, Biomedical Informatics and Medical Education at the University of Washington School of Medicine. Contact Dr. Whipple at mwhipple@uw.edu.

Moderators

Holly J. Humphrey, MD, MACP (AΩA, University of Chicago Pritzker School of Medicine, 1983) is President of the Josiah Macy Jr. Foundation, Ralph W. Gerard Professor in Medicine Emerita, The University of Chicago. Contact Dr. Humphrey at: 44 East 64th Street, New York, NY; hhumphrey@macyfoundation.org.

Wiley "Chip" Souba, Jr., MD, ScD, MBA (AΩA, University of Texas McGovern Medical School, 1978) is Professor of Surgery, Geisel School of Medicine at Dartmouth. Contact Dr. Souba at: wiley.w.souba.jr.@dartmouth.edu.

John Tooker, MD, MBA, MACP (AΩA, University of Colorado, 1970) is the Emeritus Executive Vice President and CEO of the American College of Physicians. Contact Dr. Tooker at jtooker@mail.acponline.org.

Production

Laurie Goss is the Art Director/Graphic Designer at Alpha Omega Alpha Honor Medical Society. Contact Ms. Goss at: 12635 E. Montview Blvd., Suite 270, Aurora, CO 80045; lgoss@alphaomegaalpha.org.

Dee Martinez is Chief of Staff at Alpha Omega Alpha Honor Medical Society, and Managing Editor of *The Pharos*. Contact Ms. Martinez at: 12635 E. Montview Blvd., Suite 270, Aurora, CO 80045; dee@alphaomegaalpha.org.

Introduction

For the first time ever, the Alpha Omega Alpha Honor Medical Society held its biennial Medical Professionalism Best Practices conference virtually. The COVID-19 pandemic did not allow for travel, but ultimately made the conference a unique experience with participation from many more people.

The videoconference platform, held over three days for three hours per day, brought myriad medical professionals, communicators, educators, medical school students, and residents together to brainstorm and discuss maintaining medical professionalism during times of crisis.

At the conclusion of the conference, the inclusion of multiple voices from numerous schools, specialties, and professional areas brought a diversity not previously experienced during this conference. Due to the success of this conference, the AΩA Professionalism Committee will work to ensure inclusive and diverse conference opportunities for future conferences.

Following is a list of participants who joined the videoconference each day. This list is in addition to the presenters and moderators:

Jovan Alvarez, medical school student, Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas, Class of 2024.

Jonathan Amiel, MD (AΩA, Columbia University Vagelos College of Physicians and Surgeons, 2007), Associate Dean for Curricular Affairs, and Associate Professor of Psychiatry, Columbia University Medical Center.

Libby Appel, AΩA Programs Manager.

Talia Arawi, PhD, founding Director, Salim El-Hoss Bioethics and Professionalism Program-American University of Beirut Faculty of Medicine and Medical Center.

Billy Ray Ballard, DDS, MD (AΩA, Meharry Medical College School of Medicine, 1995, Alumnus), Professor and Chair of the Department of Pathology, Anatomy, and Cell Biology and Associate Dean for Continuing Medical Education, Meharry Medical College.

James Bernat, MD (AΩA, Dartmouth Geisel School of Medicine, 1973, Faculty), Emeritus Professor of Neurology, and the former Director of the Program in Clinical Ethics at the Dartmouth-Hitchcock Medical Center.

Carol Bradford, MD, FACS (AΩA, University of Michigan Medical School, 1986), Dean, The Ohio State University College of Medicine.

Wendy Ciancio, Partner, Whipplewood CPAs.

Lynn Cleary, MD (AΩA, The Ohio State University College of Medicine, 1978), Sr. Associate Dean for Education and VP for Academic Affairs, SUNY Upstate Medical University.

Rachel Cordray, Director of Communications, The Ohio State University Wexner Medical Center.

David Dale, MD (AΩA, Harvard Medical School, 1966), Oncologist and Professor of Medicine at the University of Washington, former President of the American College of Physicians, and former Dean of the University of Washington Medical School.

Skylar Davidson, medical school student, Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas, Class of 2024.

Deborah DeWaay, MD (AΩA, Medical University of South Carolina College of Medicine, 2011, Faculty), Associate Dean, College of Medicine Department of Medical Education; Associate Dean, Undergraduate Medical Education, Office of Educational Affairs; Hospitalist, Internal Medicine; Professor, College of Medicine Internal Medicine, University of South Florida Health; and AΩA Fellow in Leadership.

Kristen Engdahl, Lead Writer, Executive Communications, Association of American Medical Colleges.

Joseph J. Fins, MD, MACP, FRCP (AΩA, Weill Cornell Medical College, 2011, Faculty) E. William Davis, Jr. M.D. Professor of Medical Ethics and Chief of the Division of Medical Ethics; Professor of Medicine; Professor of Public Health; and Professor of Medicine in Psychiatry, Weill Cornell Medical College.

Jonathan Fish, MD (AΩA, SUNY Upstate Medical University College of Medicine, 1999), Pediatric Hematology/Oncology, Northwell Health, and AΩA Fellow in Leadership.

Ellen Friedman, MD (AΩA, Baylor College of Medicine, 2017, Faculty), Director, Center for Professionalism in Medicine, Professor of Otolaryngology, Baylor College of Medicine.

Jack Fuhrer, MD (AΩA, Renaissance School of Medicine at Stony Brook University, 1997, Faculty), Associate Dean for Admissions and Career Counseling Associate Professor of Medicine Career Counseling, Stony Brook School of Medicine.

Patricia Gabow, MD (AΩA, Perelman School of Medicine at the University of Pennsylvania, 1969), former CEO Denver Health and Hospital Authority.

Laurie Goss, AΩA Art Director.

Lori Kerr, AΩA Director of Member and Chapter Services.

Amy Lee, MD (AΩA, Tufts University School of Medicine, 2002), Associate Professor of Family Medicine, and Vice Chair for Academic Affairs in the Department of Family Medicine, Tufts University School of Medicine.

Sharon Lewis, MD (AΩA, University of Miami Miller School of Medicine, 2005), Assistant Dean for Diversity Recruitment in the Program for Diversity and Inclusion, and Associate Professor of Clinical Neurology, Penn Medicine.

Dee Martinez, AΩA Chief of Staff.

Barbara McAneny, MD (AΩA, University of Iowa Roy J. and Lucille A. Carver College of Medicine, 1977), CEO, New Mexico Oncology Hematology Consultants, LTD.

Ryland McDermott, medical school student, Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas, Class of 2024.

Marvi Moreno, medical school student, Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas, Class of 2024.

Dagoberto Estevez Ordoñez, MD (AΩA, Vanderbilt University School of Medicine, 2018), Neurosurgery Resident at the University of Alabama.

Bob Phillips, MD, MSPH (AΩA, University of Florida College of Medicine, 2016, Alumnus), Director, The Center for Professionalism and Value in Health Care.

José Ginel Rodríguez, MD (AΩA, Universidad Central del Caribe School of Medicine, 1996, Faculty), Dean of Health Sciences at Escuela De Medicina San Juan Bautista, Puerto Rico.

Michelle Santiago-Rivera, MD (AΩA, University of Puerto Rico School of Medicine, 2004), Family Medicine Specialist, Aguada, Puerto Rico.

Jennifer Schlener, Chief of Staff, Association of American Medical Colleges.

Gary Shen, MD (AΩA, University of Nevada, Reno School of Medicine, 2004, Faculty), Assistant Dean for Clinical Education, and Associate Professor of Surgery, Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas.

Jeff SooHoo, MD (AΩA, Loyola University Chicago Stritch School of Medicine, 2009), Ophthalmologist, University of Colorado Anschutz Medical Campus.

Kayla Spencer, writer, Association of American Medical Colleges.

Donald Wilson, MD (AΩA, SUNY Downstate Health Sciences University, 1992, Alumnus), former Dean, University of Maryland School of Medicine.

Dan Wolpaw, MD (AΩA, Case Western Reserve University School of Medicine, 1976), Professor of medicine and humanities, Penn State College of Medicine.

Chapter 1

Leading in Health Care: Beyond the COVID-19 Pandemic

Richard L. Byyny, MD, FACP

As Winston Churchill once said, “Never let a good crisis go to waste.” From the devastating COVID-19 pandemic, we have learned myriad lessons—good and bad. Lessons that we cannot let go to waste.[1]

As history has taught us, leaders are often forged from unexpected crises. During the COVID-19 pandemic, physicians and physician leaders have been called on to inspire people, patients, teams, and each other to stand strong, and be resilient and resolute in a common devotion to serving the suffering. Many of our colleagues and health care team members have been leading from the trenches and have delivered care and support with competence, understanding, candor, consistency, character, and caring while also placing themselves, their colleagues, their family members, and others at great risk of contracting this deadly disease. These are medical professionals who answer the call to duty responsibly and with clarity and encouragement. Many, including Dr. Anthony Fauci (AΩA, Weill Cornell Medical College, 1965), Dr. Deborah Birks, Dr. Celine Gounder (AΩA, University of Washington School of Medicine, 2004) have been forthright professional colleagues speaking truth to power and leading with dignity, respect, knowledge, and a commitment to their fellow Americans.

One of the biggest barriers to overcoming this pandemic has been the fact that the United States truly does not have a health care system. This pandemic has exposed the lack of an effective, responsive, and affordable health care system. Winston Churchill provided a wonderful analogy for the state of our current health care system, it is “a riddle, trapped in a mystery, inside an enigma.”[1]

The U.S. is the only developed country in the world that has not determined that health care is a fundamental human right with universal health care for its citizens. Universal health care should be considered by all as a social good, a national priority, the responsibility of everyone.

The current situation is a relic of the establishment of our democracy in 1789, when there were just 13 colonies with about four million people to govern. One of the primary goals of our constitutional representative form of government was to prevent a monarchy. Hence, we have the federalist model that was partially designed to prevent an autocracy or monarchy from occurring in our country.

Every U.S. citizen is a citizen of two governments—national and state. The federal government operates under a Constitution dealing with the responsibilities of the central and regional governments to prevent central tyranny. The federal government has limited power, thus delegating to the states most governmental functions.

We have grown into a very complex country with 50 states, 14 territories, and 331 million people. Matters that are considered within the express or implied powers of the Constitution—currency, the post office, interstate commerce, and the military, etc.—are governed by the federal government, while everything else, including health care, is governed by the states This results in 50 versions, or systems, of health care within our country.

Allowing states to do their own thing and experiment with health care policies and funding in the absence of overarching federal policy provisions and legislation has proven to be chaotic and debilitating.

The federalism approach to the COVID-19 pandemic has not worked particularly well, leaving our country's response disjointed and confusing. Federalism was a barrier in responding to COVID-19 public health and medical issues that impact all our citizens, regardless of where they reside. It was slow to respond to the challenges of the pandemic, creating inequities in the treatment of citizens from different states or regions. It has created the perception of a cumbersome decision-making process with the inability to collaboratively implement processes to achieve outcomes for the greater good. Our recent and long-term experiences provide strong evidence that we need significant changes at the national level to improve health care for all.

Serving society as a public good

The toll of the pandemic in the U.S. has further exposed the need for universal health care to meet the needs of patients, physicians, health care providers, the public's health, and to serve society as a public good.

In January 2020, the American College of Physicians (ACP), the largest professional physician organization in the U.S., published its health and policy committee recommendations to transition to a system of universal health coverage. Its vision of a better health care system includes universal health care for all ensuring that everyone has coverage for, and access to, the care they need at a cost they and the country can afford. It details payment and delivery systems that put the interests of patients first by supporting physicians and their care teams in delivering high-value patient-centered care. It suggests that spending be redirected from unnecessary administrative and other for-profit revenues to the funding of health care coverage, research, public health, and interventions to address the social determinants of health. It empowers clinicians and hospitals to deliver high-value, evidence-based care through a process that prioritizes and allocates funding and resources with the engagement of the public and physicians. It supports financial incentives that are aligned to achieve better patient outcomes, lower costs, and reduced inequities. And, it encourages the redesign of delivery systems to make it easier for patients to navigate and receive care conveniently and effectively. Paramount to the ACP's plan is a health care system where all people receive unbiased, equitable, and excellent health care services.[2]

The ACP put forward two options—a single payor option or a public option with greater insurance company regulation to provide care needed for all at a cost patients and our country can afford.

In February 2021, a coalition of health care associations including the American Medical Association, America's health insurance plans, the American Academy of Family Physicians, the American Benefits Council, the American Hospital Association, the Federation of American Hospitals, and the U.S. Chamber of Commerce agreed to pursue universal coverage. They noted, "While we sometimes disagree on important issues in health care, we are in total agreement that Americans deserve a stable health care market that provides access to high-quality care and affordable coverage for all."[3] The coalition agreed to pursue universal coverage through market-based solutions built on the Affordable Care Act.

These are bold affirmations that physicians and health care providers are in alignment for change within the system. How to accomplish this goal remains a major challenge for our country's leaders and for physicians, other health professionals, and the public at large.

A social good

Now is the time to enact a U.S. health care system to provide universal health coverage as a social good. It must become a national priority to fulfill our public and social contracts.

Currently, in the U.S., the military health care system, Indian Health Services, the Veterans Health Administration, and Medicare are all government single payor systems. Medicaid and the Child Health Insurance Program are jointly funded by the federal government and state governments.

Over the past two years, during the COVID-19 pandemic, Medicaid and CHIP enrollment increased by 16.7 million, a 23.4 percent increase nationally.[4] It now covers more than 87 million U.S. residents, about 45 percent of U.S. childbirths, more than 60 percent of long-term services, and 25 percent of mental health care. Medicaid is the largest single payor of health care in the U.S.[5]

Medicare provides health coverage for 54 million elderly, or about six percent of the population.[6]

This means that approximately 50 percent of U.S. citizens are covered by single payor health care systems.

Private health insurance markets cover about 179 million U.S. citizens or slightly more than half of the population through more than 900 insurance companies at a cost of $1.195 billion or 28 percent of health care expenditures.[7]

The remainder continue to be uninsured, and a serious accident or an illness or other health issue that results in emergency care and/or an expensive treatment plan can result in financial ruin, bankruptcy, and take a colossal toll on patients, consumers, and society.

The right thing to do

So, why should we do more, if approximately 50 percent of our people are already covered by some form of single government insurance? Why do we need universal health care?

Universal health care in the U.S. is the right thing to do!

Even though many in the U.S. have some type of health insurance, many remain uninsured, underinsured, or live with the risk of losing health insurance should they lose their job. We need universal health care to overcome these inequities and stressors.

This raises the question: Is health and health care a public good? Who provides the services in rural, urban, and underserved locations if the providers, hospitals, technology, and services cannot be profitable to insurance companies? Should private insurance companies be required to serve unprofitable communities and individuals as part of their public responsibility? Should they be required to provide support to develop a system, with other providers, to serve and support those locations as a part of their social responsibility?

When health care is available to all, no matter their geographic location or zipcode, workers can afford to move from one location and job to another where they can provide more value to grow the economy. This supports economic development, especially in rural and disadvantaged communities.

The cost of health insurance

The ongoing dramatic increases in health care costs also need to be addressed. The U.S. spends roughly 50 percent more than other industrialized countries on health care, and health care costs are approaching 20 percent of the nation's gross domestic product. The average American family spends approximately $14,000 dollars a year, out of pocket not counting deductibles and co-payments, on health insurance,[8] and employers spend approximately $16,000 per employee per year.[9] This affects the cost of services and goods in the general economy for everyone.

There is a little known law, enacted by congress 70 years ago, that both exempts insurance companies from federal antitrust law and consigns the right to regulate insurance in all other respects to the states. Therefore, insurance companies can essentially dominate markets within states without violating antitrust law, and are prohibited from providing insurance across state boundaries. The result is that, according to the Commonwealth Fund, the U.S. has the highest number of uninsured citizens in the industrialized world.[10]

A Commonwealth Fund a report published in 2021[10] found that:

- The U.S. spends more on health care as a share of the economy—nearly twice as much as the average developed country—yet has the lowest life expectancy and highest suicide rate.
- The U.S. has the highest chronic disease burden and obesity rate that is two times higher than the average of other developed countries.

- Americans had fewer physician visits than peers in most countries, which may be related to a low supply of physicians in the U.S.
- Americans use some expensive technologies, e.g. MRIs, and specialized procedures, e.g., hip replacements, more often.
- The U.S. performs better in terms of some preventive measures, e.g. breast cancer screening and flu vaccination in older people.
- The U.S. has the highest number of hospitalizations from preventable causes and the highest rate of avoidable deaths.
- Americans have the highest level of health care spending, yet, have fewer physician visits than other countries.

The Commonwealth report determined that the U.S. should reduce health care costs and strengthen access to health care and primary care systems. It concluded that the U.S. health care system is the most expensive in the world and that Americans continue to live relatively unhealthier and shorter lives than those in other high-income countries, and that efforts need to be made to limit increases, lower costs, and improve affordability and access to care.[10]

A National Health Reserve System

Comprehensive health care reform and universal health care—I call it a National Health Reserve System (NHRS)—could be the solution. The NHRS would be a transparent system of governance and oversight with clear responsibility and coordination for universal health care in the U.S. based on the needs of patients and communities, at an affordable cost. A NHRS would work within, and across, regions and states to provide health care for all. A two-phased approach to transition to universal health care based on a NHRS model would be optimal for all involved.

Unfortunately, federal guidelines for Medicaid are broad, allowing states a great deal of flexibility in designing and administering their programs. As a result, Medicaid eligibility and benefits can, and often do, vary widely from state to state, making each state's program unique. This means that each state has its own Medicaid eligibility standards. However, in all states, Medicaid plays a key role by providing affordable health coverage for vulnerable populations and is the largest source of federal funds to states. The U.S. can provide long-term national support for the recent state expansions of Medicaid—allowing for the changes implemented during COVID-19—and make Medicaid a national and regional single payor with state cooperation. This would result in half of Americans receiving health care in a single payor system.

An NHRS would centralize Medicaid and CHIP as a national program for all 50 states and the U.S. territories, and have it administered by the national Centers for Medicare & Medicaid Services (CMS) with continuation of Medicaid offices in each state. The eligibility rules would be the same for everyone and coverages would be determined on a regional basis. CMS, with the support of states and regions, would fund the system, provide continuity, and provide proper health care management and reimbursement for services, as they do with Medicare. All Medicaid and CHIP recipients would be covered by a comprehensive set of health care services for adults and children. Institutional long-term care would be included as part of the benefits package.

The remaining 44 percent of privately insured people would see no change as they would continue to be covered under their employer-based health insurance or be self-insured. However, should they lose their job, and hence their employer-based health insurance, they could easily convert over to the NHRS system and its national coverage plan.

All patients in Medicare, Medicaid, and CHIP—and in the future those in the NHRS—would have an electronic smart card with their electronic health record. The smart card would include their medical record, billing functions, and other data linked to a central repository.

Eligibility and reimbursement of Medicare, Medicaid, and CHIP would be separate, but the process would be integrated. All licensed and certified providers would be eligible to participate in the Medicaid program. Medicare and Medicaid would develop and implement a national fee schedule.

The result would be having more than 50 percent of the U.S. population enrolled in a national health care system under the oversight and governance of the NHRS. This would be transparent to those currently covered under the aforementioned government programs, and by adding the uninsured under this system, 56 percent of Americans would be insured under a single payor system. We would achieve universal health coverage in systems that are integrated, coordinated, managed, responsive, and affordable. We would be putting patients and community needs first.

A transparent system

The NHRS would be a transparent system of health and medical care governance and oversight with clear responsibility and coordination for universal health care in the U.S. based on the needs of patients and communities at an affordable cost.

The creation of an NHRS by the President and Congress, modeled after the Federal Reserve System, would provide a quasi-independent centralized national governance, policy, and regulatory organization for health care that is evidence- and data-driven for public health in the U.S.

The NHRS would focus on health outcomes, patient satisfaction, and the efficient use of resources. It would be run by a Board of Governors that provides broad supervisory control over health care and health care organizations to ensure that the system operates responsibly.

The Board of Governors would be a federal agency consisting of nine governors appointed by the President and confirmed by the Senate, each serving a 14-year term with no option for reappointment, thereby maintaining political independence. The Chair and Vice Chair would be appointed by the President from the existing Board of Directors, confirmed by the Senate, to serve four year terms, and could be appointed for multiple terms.

The NHRS would have 12 geographic districts with representation of states in the district included in each regional district. It would have a national board representative of the 12 districts, and a governing board which would include nine members. No member of the board would serve for more than nine years to ensure full national representation while preserving continuity.

The 12 district boards would predominantly be composed of experts in the medical community—physicians, nurses, and other health professionals—representing hospitals, private practices, clinics, government and private insurance carriers, academic health centers, health care finance professionals, state and local representatives, and those who receive health care services in that region.

The NHRS would organize and utilize experts, data, research, and evidence to evaluate all aspects of health care delivery and funding in the 12 geographic regions, and collectively determine the best policies, organization, regulations, cost, and reimbursement in support of improving health care across the U.S.

The values of the NHRS would be a commitment to the public's interest, quality, excellence, independence, and analysis. Its primary objective would be to improve the health and well-being of patients, communities, and the entire U.S. through professionalism, innovation, and virtue in doing what is best for Americans. It would utilize the values of medical professionalism to serve patients and limit conflicts based solely on financial profit. It would forge a collaborative, responsible, organized, federal and state health care system.

The NHRS would work to ensure seamless access to services for patients, regardless of their income, socioeconomic status, or geographic location. It would work to eliminate health inequities and promote scientific and practice-based research to improve patient health and clinical care. The NHRS would be politically independent and financially sustainable over the long term.

Under an NHRS, Americans would gain the security that comes with stable, high quality, affordable health care coverage. The NHRS would positively affect people's health and lives. However, to be successful, an NHRS must be transparent and politically independent, but ultimately accountable to elected officials and all Americans. It would make decisions in public, and Congress would subject it to strict auditing and reporting requirements.

The time is now

The time is now for much needed transformation of the U.S. health care system. The COVID-19 pandemic has made this more apparent than ever. We cannot, and must not, let this current crisis go to waste.

References

1. The Quotable Winston Churchill: A Celebration of Wit and Wisdom. London: Running Press, 2013.
2. Erickson SM, Outland S, Joy S, Rockwern B, et al. Envisioning a Better U.S. Health Care System for All: Health Care Delivery and Payment System Reforms. Ann Intern Med. 2020; 172(2 Suppl): S33-S49. doi:10.7326/M19-2407.
3. American Academy of Family Physicians. Health Care and Employer Groups Announce Principles to Protect Patients and Achieve Universal Coverage: Affordable Coverage Coalition Lays out Path to Expand Coverage. February 10, 2021. https://www.aafp.org/news/media-center/releases/universal-healthcare-coverage.html.
4. Corallo B, Moreno S. Analysis of Recent National Trends in Medicaid and CHIP Enrollment. KFF. Jul 01, 2022. https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/
5. Medicaid.gov. March 2022 Medicaid & CHIP Enrollment Data Highlights. https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html.
6. Freed M, Biniek JF, Damico A, Newman T. Medicare Advantage in 2021: Enrollment Update and Key Trends. KFF. Jun 21, 2021. https://www.kff.org/medicare/issue-brief/medicare-advantage-in-2021-en.
7. CMS.gov. NHE Fact Sheet. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.
8. Porretta A. How Much Does Individual Health Insurance Cost? eHealth. January 21, 2022. https://www.ehealthinsurance.com/resources/individual-and-family/how-much-does-individual-health-insurance-cost.
9. Walker E. How much do employers pay for health insurance? PeopleKeep.com. March 24, 2022. https://www.peoplekeep.com/blog/cost-of-employer-sponsored-health-insurance.
10. The Commonwealth Fund. Mirror, Mirror 2021—Reflecting Poorly: Health Care in the U.S. Compared to Other High-Income Countries. Augusut 4, 2021. https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly.

Chapter 2

Health care delivery: A view from the Blue Ridge Academic Health Group

Alfred (Fred) Sanfilippo, MD, PhD

During the extensive discussion and debate in 2007-2008 on health care reform in general, and the Accountable Care Act (ACA) in particular, the Blue Ridge Academic Health Group (BRAHG) discussed and proposed an alternative plan to create a public-private, federally funded United States Health Board (USHB) that was modeled on the Federal Reserve System.[1] Recent editorials by Richard Byyny, MD (AΩA, Keck School of Medicine of the University of Southern California, 1964) in *The Pharos* revived discussion about the potential benefits of creating a National Health Board modeled on the Federal Reserve System.[2,3] This stimulated a supportive letter sent to the editor referencing the earlier BRAHG report,[4] and an expanded proposal by Steven Lipstein, MHA and myself on Repositioning Fiscal Intermediaries, which was published as a subsequent editorial in *The Pharos*.[5]

The Blue Ridge Academic Health Group (BRAHG)

BRAHG was founded in 1997 by the Health Policy Center at the University of Virginia and is an ad hoc assembly of present and recent academic health center (AHC) directors, along with other clinical, academic and health policy thought leaders. BRAHG meets annually for three to four days to study and report on issues of importance to improving the health care system, with special focus on the role of AHCs. Membership is by invitation only and is purposefully kept relatively small so as to maintain an intimate, round-table environment for discussing issues and developing recommendations. Members are nominated and elected by the existing BRAHG members.

BRAHG Members (2021)

Co-Chairs	
Jonathan Lewin, MD, Emory, (AΩA, Yale University School of Medicine, 1985)	Jeffery Balser, MD, PhD, Vanderbilt, (AΩA, Vanderbilt University School of Medicine, 2004, Alumnus)
Active Members	
*Wright Caughman, MD, Emory	Michael Drake, MD, University of California, (AΩA, University of California San Francisco School of Medicine, 1989, Alumnus)
Julie Freischlag, MD, Wake Forest	*Michael Johns, MD, Emory, (AΩA, The Johns Hopkins University School of Medicine, 1996)
Lloyd Minor, MD, Stanford, (AΩA, Stanford University School of Medicine, 2014, Faculty)	Mary Naylor, PhD, University of Pennsylvania
Dan Podolsky, MD, University of Texas Southwestern, (AΩA, University of Texas Southwestern Medical School, 2009, Faculty)	Kenneth Polonsky, MD, University of Chicago
*Claire Pomeroy, MD, Lasker Foundation	Paul Rothman, MD, Johns Hopkins, (AΩA, Yale University School of Medicine 1984)
Marschall Runge, MD, PhD, University of Michigan	*Fred Sanfilippo, MD, PhD, Emory, (AΩA, Duke University School of Medicine, 1987, Alumnus)
Richard Shannon, MD, Duke, (AΩA, University of Texas Medical Branch School of Medicine, 1995, Faculty)	David J. Skorton, MD, Association of American Medical Colleges, (AΩA, Northwestern University Feinberg School of Medicine, 2020, Alumnus)
Irene Thompson, Vizient	
Senior Members	
William Brody, MD, PhD, Salk Institute, (AΩA, Stanford University School of Medicine, 1971)	*^Don Detmer, MD, MA, University of Virginia
Michael Geheb, MD, IBM Watson	William Kelley, MD, University of Pennsylvania
Darrell Kirch, MD, Association of American Medical Colleges, (AΩA, University of Colorado School of Medicine, 1976)	Elizabeth Nabel, MD, ModeX, (AΩA, Weill Cornell Medical College, 1980)
Arthur Rubenstein, MBBCh, University of Pennsylvania, (AΩA, University of Chicago Pritzker School of Medicine, 1972, Faculty)	John Stobo, MD, University of California, (AΩA, University at Buffalo Jacobs School of Medicine and Biomedical Sciences, 1968)
Bruce Vladeck, PhD, CMS	
*Past Co-Chairs; ^Founding Chair	

Former BRAHG Members	
David Blumenthal, MD, Harvard, Massachusetts General Hospital, (AΩA, Harvard Medical School, 1975)	Enriqueta Bond, PhD, Wellcome Fund
Roger J. Bulger, MD, Association of Academic Health Centers	Robert W. Cantrell, MD, University of Virginia, (AΩA, George Washington University School of Medicine and Health Sciences, 1960, Alumnus)
Jordan Cohen, MD, Association of American Medical Colleges, (AΩA, Tufts University School of Medicine, 1974, Faculty)	Denis Cortese, MD, Arizona State University
Catherine DeAngelis, MD, Journal of the American Medical Association, (AΩA, The Johns Hopkins School of Medicine, 1990, Faculty)	Haile T. Debas, MD, University of California San Francisco
Arthur Garson, Jr., MD, MPH, University of Virginia, (AΩA, Duke University School of Medicine, 1973)	Jeff Goldsmith, PhD, Health Futures
Gary Gottlieb, MD, MBA, Partners, (AΩA, Albany Medical College, 2008, Alumnus)	Robert P. Kelch, MD, University of Michigan, (AΩA, University of Michigan Medical School, 1965)
Peter O. Kohler, MD, Oregon Health Sciences Center, (AΩA, Duke University School of Medicine, 1963)	Jeffrey Koplan, MD, MPH, Emory
Lawrence Lewin, Consultant	Steve Lipstein, MHA, BJC Healthcare
Edward D. Miller, MD, Johns Hopkins	Jeff Otten, MA, MBA, Brigham & Women's Hospital
Mark Penkhus, MHA, Vanderbilt	Mark Richardson, MD, Oregon Health Sciences Center
George F. Sheldon, MD, University of North Carolina, (AΩA, University of Kansas School of Medicine, 1961)	Steven A. Wartman, MD, PhD; Association of Academic Health Centers, (AΩA, The Johns Hopkins University School of Medicine, 1970)

BRAHG members seek to take a societal view of health care and develop recommendations for AHCs to help create greater value for society. BRAHG also recommends public policy to enable AHCs and others to accomplish these ends. Recommendations are provided in published reports that are discussed, outlined, and drafted during the annual meeting. The draft reports are subsequently edited and finalized with consensus agreement by the members, and widely distributed. Since its inception in 1997, 25 reports have been published and are available at no cost on-line at: http://whsc.emory.edu/blueridge/publications/reports.html.

Recommendations of the BRAHG are focused in several areas including academic performance, leadership, and professionalism; value-based health care and population health; health information technology, informatics, and artificial intelligence; and health care reform.

BRAHG Reports

1. Academic Health Centers: Getting Down to Business (March 1998)
2. Promoting Value & Expanding Coverage: Good Health is Good Business (December 1998)
3. Into the 21st Century: Academic Health Centers as Knowledge Leaders (June 2000)
4. In Pursuit of Greater Value: Stronger Leadership in and by Academic Health Centers (December 2000)
5. e-Health and the Academic Health Center in a Value-driven Healthcare System (June 2001)
6. Creating a Value-driven Culture & Organization in the Academic Health Center (December 2001)
7. Reforming Medical Education: Urgent Priority for the Academic Health Center in the New Century (May 2003)
8. Converging on Consensus: Planning the Future of Health and Health Care (October 2004)
9. Getting the Physician Right: Exceptional Health Professionalism for a New Era (November 2005)
10. Managing Conflict of Interest in AHCs to Assure Healthy Industrial and Societal Relationships (September 2006)
11. Health Care Quality and Safety in the Academic Health Center (November 2007)
12. Advancing Value in Healthcare: The Emerging Transformational Role of Informatics (November 2008)
13. Fall 2008 Policy Proposal: A United States Health Board (November 2008)
14. The Role of Academic Health Centers in Addressing the Social Determinants of Health (February 2010)
15. The Affordable Care Act of 2010: The Challenge for Academic Health Centers in Driving and Implementing Health Care Reform (April 2012)
16. Academic Health Center Change and Innovation Management in the Era of Accountable Care (April 2012)
17. Health Professionals Education: Accelerating Innovation Through Technology (Spring 2013)
18. A Call to Lead: The Case for Accelerating Academic Health Center Transformation (Spring 2014)
19. Refocusing the Research Enterprise in a Changing Health Ecosystem (Winter 2015)
20. Synchronizing the Academic Health Center Clinical Enterprise and Education Mission in Changing Environments (Winter 2017)
21. The Academic Health Center: Delivery System Design in the Changing Health Care Ecosystem—Sizing the Clinical Enterprise to Support the Academic Mission (May 2017)
22. The Hidden Epidemic: The Moral Imperative for Academic Health Centers to Address Health Professionals' Well-Being (January 2018)
23. Separating Fact from Fiction: Recommendations for Academic Health Centers on Artificial and Augmented Intelligence (January 2019)
24. The Behavioral Health Crisis: A Road Map for Academic Health Center Leadership in Healing Our Nation (January 2020)
25. Sustaining a Successful Academic Enterprise in the post-COVID Environment (in press)

Leadership and professionalism

Since its inception, BRAHG has made numerous recommendations on the importance of leadership and professionalism, and emphasized the enhancement of these attributes in student education and staff development. The reports and recommendations in December 2000 and November 2005 were focused on these topics. BRAHG recommendations have included:

- AHCs should develop the leadership skills of their professionals and students to build stronger organizations and value-driven health systems for their communities. (December 2000)
- AHCs should work with, and develop the capacity of, their governance bodies to provide strong leadership, sound guidance, and effective decision-making for their institutions. (December 2000)
- AHCs should partner with professional organizations and specialty societies to strengthen leadership skills of their faculty and students, help create and support needed change within AHCs, and advocate for necessary changes in the health care system. (December 2000)
- AHCs should commit to ongoing leadership, professional, and staff development as an integral part of each mission. (December 2001)
- AHCs should embrace, develop, promote and reward professionalism of interdisciplinary teams and systems in health care. (November 2005)
- Training programs, accreditation, and certification should be reformed to meet the goals of team and systems professionalism. (November 2005)
- AHC leaders must understand, develop, and promote the highest levels of ethical and professional standards to manage faculty and staff conflicts of interest. (September 2006)
- To prevent loss of empowerment, professionalism in medicine must be enhanced with the ethical and social responsibilities it entails for every physician. (April 2012)
- AHCs should support faculty to acquire skills and experience to develop and use new education technologies. (Spring 2013)
- AHCs should articulate the values and leadership skills for their successful faculty and staff, and build trust to help them make decisions in the face of uncertainty, and embrace change. (Spring 2014)
- APT criteria should be redesigned to incentivize personal well-being and professionalism, collegiality, and community-building. (January 2018)
- AHC leaders should raise awareness of the existence and importance of burnout without associating shame or stigma, and provide confidential access to appropriate services. (January 2018)
- AHCs should develop and implement programs and process changes that promote well-being and professionalism. (January 2018)

Value-based health care and population health

The first BRAHG meetings, more than 20 years ago, included discussions and recommendations on the emerging concepts of value-based health care and population health. These have remained important topics at subsequent BRAHG meetings, and a necessary context for recommendations on many other issues. BRAHG recommendations have included:

- AHCs must use performance measures with evidence-based value to make decisions and demonstrate public accountability. (March 1998)
- AHCs should develop and implement performance measures that assess their impact on the community and region. (March 1998)
- AHCs and other healthcare providers should provide leadership on population health management and assume responsibility for improving the health of their communities. (December 1998)
- AHCs should seek leaders with the ability (i.e., qualities and experience) to transform their organizations, and to work with their communities to build value-driven health systems. December 2000)
- AHCs should develop the research and educational agenda needed to ensure that our health care system that is safe, timely, effective, efficient, equitable, and patient-centered. (October 2004)
- AHCs should work closely with payors, employers, and policy makers to ensure that benefits management and payment systems report information on quality, outcomes, etc., to inform consumer choice of health plan and provider. (June 2005)
- Competency in social determinants of health should become part of medical education, training, and certification. (January 2010)
- AHCs should define and commit to addressing social determinants of health in their community and region. (January 2010)
- Congress should enact legislation to support innovative programs and demonstration projects addressing social determinants of health. (January 2010)
- AHCs should prioritize behavioral health with a strategy and business plan that improves access and meets the needs of patients and employees. (January 2010)

Health information technology, informatics, and AI

The importance of health information technology (HIT) and informatics has been a factor in BRAHG discussions, and was the focus of two reports in 2001 and 2008. The emergence of AI (augmented/artificial intelligence) as a major consideration across the clinical, research and educational missions of AHC was the focus of a 2019 report. BRAHG recommendations have included:

- AHCs should recognize health informatics as a specialty. (June 2001)

- AHCs should advocate for the development of a national health information infrastructure, reimbursement for telemedicine, and removing state barriers to e-health and Internet access. (June 2001)
- AHCs should take a leadership role in identifying, making available, and assuring quality health care information for patients and the public via the Internet. (June 2001)
- All academic and professional organizations should treat information technology (IT) and informatics as core competencies throughout the continuum of education and in future workforce planning. (October 2008)
- AHCs should design and implement IT solutions preceded by redesign of clinical workflow and processes, and not by imposing new HIT systems on existing processes. (October 2008)
- HIT clinical notes should be focused on useful information for patient care, not for audit and payment. (2012)
- HIT standardization of record keeping and sharing, as well as meaningful use, is needed through the Office of the National Coordinator for Health Information Technology. (2012)
- AHCs should work collaboratively to develop industry partnerships and to create mechanisms and guidelines for data sharing, data aggregation, testing, and best practices. (January 2019)
- AHCs should invest in data and informatics scientists, and a governance infrastructure to support this domain of science. (January 2019)
- AHCs should ensure that educational programs embed data literacy to prepare current and future health care professionals for digitally enabled care models. (January 2019)

Health care reform

The need for health care reform has been an ongoing topic of discussion and recommendations from BRAHG. Recommendations have focused largely on how AHCs and their constituents can proactively drive changes, which was the major focus of reports in 2004, 2008, and 2012. BRAHG recommendations have included:

- By 2001, pass legislation to mandate health insurance coverage (public and/or private) for all residents. By 2005, create a framework and authorize insurance funding for all residents including preventive care and health maintenance. (Dec 1998)
- AHCs must move as a group to develop a common agenda for national health reform. (October 2004)
- AHCs should adopt a national goal for health system reform that offers financial access to health insurance for everyone. (October 2004)
- Medical professionals should address the crisis of the uninsured and the irrationality of current payment systems. (November 2005)

- Physicians should insist on standards of care driving payment, rather than payment driving delivery of care. (November 2005)
- AHCs should help achieve the goal of a value-driven, evidence-based health care system through the ACA's "triple aim" of lower costs, improved care, and better health. (April 2012)
- AHCs should provide constructive engagement and leadership in improving and correcting the ACA where it falls short. (April 2012)
- AHCs are encouraged to develop accountable care capacity building by working with partners and payors in contractual methods to create accountabilities for group performance. (April 2012)
- AHCs should advocate for comprehensive insurance coverage and expanded access for behavioral health services. (January 2020)

BRAHG policy proposal: A United States health board

A Fall 2008 report was developed by BRAHG regarding potential health care legislation that was being considered before and after the 2008 presidential election.[1] The plan was conceived by Steven Lipstein, who at the time was CEO of BJC Health and a member (and subsequent president) of the Federal Reserve Bank of St. Louis. The policy proposal was discussed with a range of constituents as well as members of the U.S. Congress and Obama Administration, but failed to get serious attention in the wake of the focus on the ACA. The goals and details of the report were:

Goals

- Bring long-term planning and decision-making for stability and consistency in health care financing.
- Address health insurance reform: benefits, access (especially vulnerable populations), risk pooling, and economic viability.
- Standardize and simplify the capture of health information and financial data.
- Collect and analyze encounter-level data specific to individual providers that can enable identification of best practices and effective models for health services delivery.
- Bring together the insurance industry, federal and state governments, and the provider community to create a uniform and standard clearinghouse(s) for all health care billing transactions.
- Make information available to the public and to the health care community to inform health care decision-making.

Details

- The national health board would consists of seven members appointed by the President with Senate confirmation, serving 14-year terms, with the chair serving renewable four-year terms.

- At least 12 districts would be established with boards of at least nine stakeholders including providers, insurers, and public members, each chaired by a public member.
- Each district board would recommend a paid executive as its president, subject to approval of the health board, which would be responsible for the recruitment of district board staff.
- A National Health Policy Committee (NHPC) would be created consisting of health board members and district board presidents, chaired by the health board chair.
- The NHPC would receive congressional authorization to make national policy decisions (within set guidelines) for health insurance regulation, payment mechanisms (not rates), and dissemination of standards of medical practice.

Fiscal intermediaries

The problems of health care cost, access, quality, and disparity were major issues being debated during the development and implementation of the ACA, and remain as significant problems in the U.S. Moreover, current trends in federal and state budgets, as well as population demographics, suggest these problems will get worse. Failed attempts to deal with these problems have been focused in policies adopted to change the behavior of consumers and providers through the fiscal intermediaries that provide health insurance. The fiscal intermediaries influence how, what and where health care is paid for, at what price, and by which providers. We have suggested an alternative approach by repositioning these fiscal intermediaries to reduce the number of public options offered by federal and state governments, and to create large multi-state regional districts that regulate and supervise private health insurance.[5] These changes would significantly reduce complexity and increase the ability to influence health care cost, access, outcomes and disparities.

Public and private health care markets

U.S. health care includes two insurance markets: a public market where government is the fiscal intermediary between consumers and producers directly or through private contractors, and a private market where private health insurance companies serve as the fiscal intermediary. Both markets are of similar size in the number of individuals covered (150 million), and funding ($2 trillion), with approximately 12 percent of people under 65 uninsured and not counted in either market.[6,7,8]

These markets differ significantly in pricing, payments, management, and regulatory oversight. Public market prices are legislated while private market prices are negotiated, which has led to multiple payment mechanisms, opaque producer pricing, regional variability in health care cost per capita, and payments by public payors (Medicare and Medicaid) often below the cost of care, requiring cross-subsidies from private payors to cover the public payor shortfall. In addition, there are significant regulatory variations across states for both markets, this contributes to problems in cost, access, quality, and there are especially disparities.

Proposed solutions

A wide range of potential solutions to the problems in U.S. health care have been proposed including a public single payor system, expanding public options, creating employer-provider associations, capitation, pay-for-performance, financial penalties, and price transparency. Unfortunately, there are significant problems with each of these, and health care expenditures are expected to continue outpacing inflation and economic growth.[6] For example, eliminating or reducing the private market would be difficult since it would impact nearly half of the U.S. population and disrupt a business sector of more than 500 billion dollars.[9] Attempts to develop private employer-provider organizations have recently failed despite the huge resources available among Amazon, JP Morgan, and Berkshire Hathaway when they created Haven Healthcare.[10]

Capitation and pay-for-performance have shown growth and benefits over decades of implementation, especially through HMOs and Medicare Advantage, but many remain wary of a gatekeeper financing system and limitations in provider payment, regardless of the patient's health care needs.

The potential benefits of financial penalties to reduce variation in health care costs and utilization are mitigated by the significant confounding factors of social, behavioral, and environmental characteristics of the population served.[11] Likewise, transparency of marginal provider pricing is highly confounded by the proportion of patients served in public markets at below cost payments. Providers who limit access to uninsured and public market patients have a financial incentive to push for greater price transparency. Their marginal pricing can be lower than providers serving more of these patients at a greater economic loss, and who must either price higher in the private market, reduce access to these low reimbursement patients, or become insolvent.

Repositioning fiscal intermediaries in the public market

Public market insurers administer more than 50 options including Medicare, Tricare, Veterans Administration Health, and state-based Medicaid programs, which vary in eligibility criteria, benefit plans, and payment rates. This large and fragmented system of public health insurance contributes to higher costs, variable access and services, and health disparities.

As a first step to address these problems, Medicaid could be consolidated into an expanded Medicare program with standards established for eligibility, benefit design, and payment to meet the needs of all those served. If successful, a second step would be to continue consolidation with the other public market programs.

The first step of consolidating Medicaid into Medicare would require an increase in Medicare payroll taxes of $225 billion-$250 billion to cover the state's one-third share of Medicaid expenditures, and an allowance of $90 billion to $100 billion to raise Medicaid payment rates to Medicare levels. Ironically, this would cost less than both the Medicare Modernization Act of 2004 and the Affordable Care Act (ACA) of 2010, and potentially less than a new public option.

The many health insurance options offered to individuals directly or through employer-sponsored plans are all regulated by the states, resulting in excessive administrative costs and substantial variation. Working together, federal and state government could establish large multi-state regional districts, chartered to regulate and supervise the private health insurance sector to improve coordination and consistency across states, reduce costs, and provide more options. Dividing the country into regional districts by the government has successful precedents with the Federal Reserve System (12 district banks), and the VA (18 Veterans Integrated Service Networks).

In a manner analogous to the U.S. health board proposed by BRAHG in 2008, each district could have its own governing body with representatives of the public, employers, health care providers, and insurers. These governing bodies could be appointed by the states that make up each district with delegated authority that is consistent across districts. A national coordinating group comprised of representatives of the regional boards and national representatives appointed by the federal government could provide guidance, alignment, and oversight of interactions among the regional districts.

The federal government previously has chartered successful public-private multi-state governing bodies to regulate the private banking sector in 1913 with the Federal Reserve System and the private health care delivery sector in 1984 with the National Organ Procurement and Transplantation Network.[12]

Impact on stakeholders

Repositioning fiscal intermediaries would reduce overhead and variation in the public market, and increase market size and competition in the private market, both of which would improve health care cost, access, quality, and disparities. The federal government would have increased costs to consolidate Medicaid with Medicare, but gain greater fiscal control over Medicaid spending, as well as health care benefit design and administration for all taxpayer supported health care. The states and territories would no longer have financial obligations for Medicaid, saving $225 billion-$250 billion that could be utilized for other priorities, and potentially reduce state taxes to offset potential increases in the Medicare payroll tax.

Private insurers would be able to develop multi-state (within district) health insurance products to enlarge and stabilize insurance risk pools and realize economies of scale and geography. Health care providers would have one public insurance plan and more private insurance plan options. The public would receive a more rational system of health insurance with more options and lower costs. Half of the population would be covered by one public option (Medicare) that would insure everyone over age 65 and everyone with low household incomes, and the other half by employer-sponsored private health insurance with guaranteed and affordable choices.

Rapid responses are required

The COVID pandemic has shown state and federal policy makers, as well as health care providers and the public, that significant challenges to the health of our society requires rapid responses, significant policy changes, and are most successful when we act collectively as a nation. The ongoing challenges of the U.S. health care system require that federal and state government take collective action with the private sector to make the bold and transformational changes needed to improve health care affordability, access, quality, and disparity. Repositioning the fiscal intermediaries in American health care is a potential means of achieving this goal.

References:

1. Blue Ridge Academic Health Group. Policy Proposal: A United States Health Board. 2008. http://whsc.emory.edu/blueridge/publications/archive/blue_ridge_policy_proposal_final.pdf.
2. Byyny RL. All things considered…the future of the U.S. health care “system.” The Pharos of Alpha Omega Alpha Honor Med Soc. 2020; 83(3): 2-10.
3. Byyny RL. Now is the time to enact a U.S. health care system. The Pharos of Alpha Omega Alpha Honor Med Soc. 2021; 84(1): 2-7.
4. Sanfilippo F. All Things Considered: National Health Reserve System. The Pharos of Alpha Omega Alpha Honor Med Soc. 2020; 83(4): 37.
5. Lipstein S, Sanfilippo F: Repositioning Fiscal Intermediaries in U.S. Health Care. The Pharos of Alpha Omega Alpha Honor Med Soc. 2021; 84(3): 2-7.
6. Keehan SP, Cuckler GA, Poisal JA, Sisko AM, Smith SD, Madison AJ, Rennie KE, Fiore JA, Hardesty JC. National Health Expenditure Projections, 2019–28: Expected Rebound In Prices Drives Rising Spending Growth. Health Affairs. 2020; 39(4): 704–14.
7. Centers for Medicare and Medicaid Services. https://www.cms.gov/.
8. Keith K. Tracking the uninsured rate in 2019 and 2020. Health Affairs Blog. October 7, 2020. https://www.healthaffairs.org/do/10.1377/hblog20201007.502559/full/.
9. Bilton RK. Medicare for All’s $600 billion question. Axene Health Partners. https://axenehp.com/medicare-alls-600-billion-question/.

10. Toussaint JS. Why Haven Healthcare failed. Harvard Business Review. January 6, 2021. https://hbr.org/2021/01/why-haven-healthcare-failed.
11. Maddox KEJ, Reidhead M, Hu J, Kind AJH, Zaslavsky AM, Nagasako EM, Nerenz DR. Adjusting for social risk factors impacts performance and penalties in hospital readmissions reduction program." Health Services Research. 2019; 54(2): 327-36.
12. Organ Procurement and Transplantation Network. About the OPTN. https://optn.transplant.hrsa.gov/governance/about-the-optn/.

Chapter 3

Respect your elders: How did we do during COVID?

Jeffrey Wallace, MD, MPH/MSO

Early on in the COVID-19 pandemic, I feared the answer to the question was "not so good." References to COVID-19 as a "boomer remover," and then statements I heard such as, "this infection is only eliminating our oldest and our weakest," were very troubling signs of ageism and a lack of respect for older adults. Gandhi said, "the true measure of any society can be found in how it treats its most vulnerable members."[1] The older adults residing in long-term care (LTC) facilities, with their variety of medical maladies and disabilities, are among our society's most vulnerable. Ageist remarks should be anathema to all of us, and especially to health professionals.

Despite these initial concerns I now firmly believe that the health care providers, medical societies, and public health agencies on the front lines of this crisis did indeed respect their elders and did a remarkable job trying to do their best for these most vulnerable members of our society. It did not take long as the pandemic progressed, to observe many examples of professionalism and leadership, especially as the COVID-19 outbreak began to wreak havoc in the LTC world.

As we all now know, the first COVID-19 case in the United States was detected in Washington in January 2020. Shortly thereafter the first major COVID-19 outbreak in a long-term care setting in the United States was detected in a facility in Kirkland, WA, in late February.[2] By mid-March that outbreak had quickly spread in the facility, infecting 101 of 130 residents (78 percent), with a case mortality rate of 34 percent. The details of this outbreak were published in the *New England Journal of Medicine* in May 2021, which is a remarkably fast turnaround and was an early example of professionalism in research, reporting, and sharing of information.

Professional health care-related organizations were even faster in mobilizing to gather and share information in real-time as the pandemic spread into LTC facilities across the U.S. Professional societies such as the American Geriatrics Society, and The Society for Post-Acute and Long-Term Care undertook efforts to provide information online to providers and facilities that were beginning to experience outbreaks by early Spring 2020. With these leadership efforts, the alarm was quickly sounded across the country and facilities started to brace and plan for the coming COVID-19 crisis in LTC settings. LTC facility leadership, from Directors of Nursing to Facility Administrators, showed their professionalism by working overtime with their staff, and local medical and public health experts to help coordinate responses to this quickly moving crisis. Facility leaders also helped with direct patient care at a time when all-hands-on-deck was needed.

Despite receiving warnings and information, containing COVID-19 in the LTC setting was extremely difficult as testing was often scarce and results were delayed. In addition, personal protective equipment (PPE) was not always available, and best policies and procedures were still being sorted out.

I am a medical director at two long-term and subacute rehabilitation facilities and although we, and other area facilities, did our best to implement recommended infection control strategies, few facilities were spared from COVID-19 infections. An outbreak that started at a Denver area facility just six weeks after the country's first outbreak in Washington, affected a substantially lower percentage of patients (63 of 150 facility residents, 44 percent compared to 78 percent in Kirkland) and the Denver facility was able contain its outbreak to four of eight units, in large part due to information and tactics to help address COVID-19 outbreaks that been quickly shared around the country.

When one of my facilities was detected with a COVID-19 outbreak we were given guidance daily from our public health department and we also received support from state political leaders who worked hard to obtain needed PPE and rapid testing resources. There were local heroes such as Dr. Nicole Ehrhart, a veterinarian by training who was instrumental in making COVID-19 testing more widely available in Colorado. She worked closely with a leading provider of senior health care in Colorado (Vivage) to institute COVID-19 screening in several LTC facilities. At a time when widespread testing was not yet available, Ehrhart's laboratory's efforts helped detect a 10 percent prevalence rate of COVID-19 infection among asymptomatic LTC staff. This helped reduce the rate of infected staff coming to work, thereby likely saving several facilities from worse outbreaks and saving many lives of residents.

By August 2021 there were about 600,000 deaths attributed to COVID-19 in the U.S. with the largest impact in older adults. (The U.S. has now surpassed one million deaths.)[3] Roughly 80 percent of COVID-19 deaths have occurred in persons age 65 and older, and about 60 percent in persons age 75 and over. Residents in LTC facilities account for nearly one-third of all COVID-19 deaths in the U.S.[4]

Did medical professionals fail older adults?

We know that COVID-19 mortality will be highest in LTC facilities as these residents almost all have underlying medical conditions that place them at high risk once infected. And, all older adults have alterations in immunity and less physiologic reserve that further increases their risk of morbidity and mortality if infected. Many residents in LTC communities are dependent on the basic activities of daily living and require frequent close contact from staff for optimal care. LTC facilities are congregate living settings filled with a high percentage of very vulnerable older adults. Facilities had the nearly impossible task of preventing any COVID-19 infections at a time when knowledge, testing, PPE and other vitally needed resources were not fully in place.

COVID-19 was brought into LTC settings primarily via visitors and staff. Prior to widespread availability of testing, it was inevitable that asymptomatic staff, family, and other visitors ranging from lab workers to oxygen suppliers would enter the facility shedding the virus. Once in the facility, even with best of containment efforts, it was inevitable that COVID-19 would spread within a facility. There are numerous vulnerable persons residing closely together in a LTC, e.g., two residents per room; residents who are impaired and cannot, or will not, cooperate with infection control efforts; and facility staff who often have to interact closely with residents and with each other. All congregate facilities from colleges to assisted living facilities to long-term care nursing facilities faced these challenges, but the morbidity and mortality associated with COVID-19 infection were magnified in the nursing home setting.

Leadership and professionalism again played essential roles rising to these challenges with efforts that included a rapid national response by mid-March 2020, even before the first outbreak in Washington had subsided.[5-6] New mandates to help prevent or reduce outbreaks in nursing facilities included:

- Near complete shut-down of all communal activities with abrupt discontinuation of dining room meals, social activities, physical therapy, exercise groups, and even the beauty parlor (over the objections of many residents). This had major adverse effects on quality of life and residents' sense of well-being.
- No physician/provider face to face visits unless essential to care for a resident. All visits were otherwise delayed or conducted virtually with assistance from facility staff who were dressed in PPE and armed with tablets and phones in patient rooms.
- No family visits.
- Screening for COVID-19 signs and symptoms including checking temperatures before allowing entry into long-term facilities.

The backbone of LTC facilities

Increased infection control responsibilities to swiftly implement policies to reduce virus spread ranged from handwashing to regular washing down of surfaces to taking resident vital signs three times a day.

These were major new requirements being added to the agenda of an already thinly stretched world of long-term care where resources are not nearly as robust relative to many other components of the American health care system. The first group to call out for professionalism is the nursing home staff, especially the front-line staff, certified nursing assistants (CNAs). CNAs are the backbone of any nursing home staff. They perform duties that range from helping mobilize residents to feeding residents to cleaning soiled persons, and these services are often rendered to cognitively impaired persons who may not be cooperative, and may even be combative. Despite providing these essential patient care needs CNAs are among the least well reimbursed workers in America. Many work at more than one nursing home facility to obtain extra paid hours to try to earn a livable wage.

This need to work more than one job increased the risk of cross pollination of COVID-19 infections from one facility to another as CNAs worked a day shift in one facility and an evening or night shift in another. The need to not miss a single paycheck added to the likelihood that a CNA worker might come to work even when ill. On top of all the usual stresses of a difficult, underpaid job, CNAs had to worry about new infection control policies, the risk of contracting COVID-19, and the possibility of a new crisis at home—who was going to watch the children at home due to COVID-19 school closures?

It is a miracle that this dedicated, and all too often underappreciated, staff consistently came to work during the early days of the COVID-19 crisis. CNAs should be the first recipient of any long-term care professionalism award. They really cannot be over-recognized for their efforts in keeping patients safe and well-cared for during the COVID-19 crisis in LTC.

The importance of CNAs was recognized by political leadership, at least in the state of Colorado. CNAs received extra payments for coming to work, and all staff were paid for time off due to illness as a mechanism to help reduce ill workers coming to work out of financial need. Unfortunately, it is far from clear that these short-term pay boosts will continue, despite the efforts of national organizations trying to champion the cause of living wages for nursing home staff.[7-9]

Pressure from outside entities

Throughout the COVID-19 crisis, much attention has properly been given to the extreme stress hospitals and intensive care units are under to care for very ill persons. Bulging hospital censuses led to increased pressure to discharge hospitalized patients as soon as safely possible. This, however, created pressure on subacute and long-term care facilities to accept patients being discharged from the hospital who were not yet ready to return home. Rules and regulations regarding the responsibilities of LTC facilities to accept patients from hospitals varied widely across the country. In Louisiana, hospitals were prohibited from discharging patients with COVID-19 to nursing homes, while New York required all LTC facilities across the state to accept these patients, including those without any test results, regardless of the local availability of hospital and intensive care unit (ICU) beds.[10] Many felt strongly that the latter was precisely the wrong approach as it required facilities already caring for very high risk persons to take on very ill patients being discharged from the hospital, many post-COVID-19 illness, or who might even be COVID-19 positive, ready or not.

Many facilities were not ready take those patients due to lack of testing, lack of PPE, and staff shortages. Such mandates brought on a prompt and vigorous pushback from individuals to public health workers to professional societies such as the American Health Care Association, The Society for Post-Acute and Long-Term

Care, and the National Center for Assisted Living.[10,11] Their late March 2020 joint statement objected to mandates for facilities to accept all patients without testing and provided recommendations to help accommodate hospital discharge needs.

Some of the innovative approaches to help hospitals safely discharge their influx of patients included converting existing rehabilitation facilities to post-COVID-19 care dedicated facilities, and the creation of segregated units within rehabilitation and long-term facilities for the care of COVID-19 infected persons. Facility leadership was instrumental in making these structural changes, often done quickly and under duress, basically building the plane as they were flying it.

Public health departments also played a key role in facilitating these changes with on-site visits and/or being readily available for facility questions. Centers for Disease Control and Prevention and local guidelines were also very helpful. Even if they were frequently changing, it was generally felt that was due to new and changing information as we all learned more about COVID-19.

The courage and professionalism of individual providers in LTC settings, from CNAs to nurses to advance practice providers (APPs) to physician providers, was a demonstration in courage and resilience. Many were at high risk for COVID-19 complications, and in the early days often had to supply their own PPE to safely see and care for patients.

At what cost?

These challenges were addressed to keep patients safe and protected from COVID-19 infection-related morbidity and mortality. Just as there is a cost to keeping children home from school to protect them from illness during the pandemic, there is a cost to isolating older adults, especially those in LTC settings.

During the early days of the pandemic, leaders placed a priority on life and no restrictions seemed too draconian. And, that saved many lives. But the adverse effects of isolation, especially in older adults, have led many to ask if the measures to save lives was worth the adverse effects of restrictions?[12-14]

There is no clear answer to this question, but I would like to share some personal patient experiences to help frame the issue of balancing preserving life versus causing sometimes irreparable harm through good intentions.

Ms. M. was a 103-year-old survivor of the 1918 great flu pandemic, and a survivor of COVID-19, which she contracted in the Spring of 2021. Prior to COVID-19, she was an active and vital member of her nursing home community. She walked about the facility daily, saying hello to others, enjoyed group music and exercise activities and card games. Her life changed dramatically with the immediate shutdown of all social activities, family visits, and therapy activities that began just as she was recovering from her COVID-19 infection. The subsequent isolation from these restrictions was magnified by her poor hearing and reduced vision that made it difficult to connect with family via zoom or telephone. With these changes, she deteriorated greatly over a one-year period. She has made it to her 104th birthday, but her function and her joy in being alive are greatly diminished. She may have had only one or two years of life left when the COVID-19 pandemic arrived, which may be true of many residents with advanced illnesses residing in nursing homes. I am not sure of her views regarding how nursing facilities responded to the COVID-19 crisis, but I do know that it greatly saddens her family, and all of us who care for her, to see how COVID-19 restrictions contributed to her decline.

Mr. P. was a 77-year-old resident who had been medically stable for several years and enjoyed frequent family visits with his children and grandchildren. He contracted COVID-19 from an asymptomatic family member who had visited him at the facility just days before strict COVID-19 visitation restrictions were put into place in early Spring 2021. The asymptomatic visitor became ill and tested positive for COVID-19 a few days after his visit with Mr. P. Mr. P. became ill about one week later and his pulmonary status rapidly declined. He elected transfer to the hospital where he worsened and passed alone in the ICU. If there were visitation restrictions in place before his family came to spend time with him, Mr. P. might still be with us. And, his family member would not have lingering thoughts about whether he contributed to Mr. P.'s demise.

Mr. K. was a vibrant 91-year-old jazz singer who regularly performed in the facility before the COVID-19 pandemic. He was completely independent. His performance opportunities rapidly dwindled to zero as facility restrictions were implemented, and local clubs shut down. With those changes, his mood, sense of joy, and quality of life took a nosedive.

Are older adults really any different in the way they experience the adverse effects that COVID-19 has had on society? My answer is a resounding yes. Older adults may not have as many alternative outlets as younger persons; Mr. K. did not have the technological know-how to go online and perform there, not that it would have brought the same satisfaction. And, many older adults are not able to heed the advice to go outside, take a walk in the woods, or do other new activities to help them cope with COVID-19 related restrictions. Older adults often have less physiologic and sociologic reserve, e.g., they are less physically active, have fewer social contacts, are more reliant on others, and/or have reduced sensory function. This places them at higher risk for adverse effects from COVID-19 related restrictions. These effects include depression, cognitive decline, and worsening physical function. Studies have shown that social isolation can hasten premature death with a mortality risk on par, or even greater than, factors like smoking and obesity.[12-14] Of course, these effects occur in children and adults of all ages, but they are magnified in older adults, especially among those residing in LTCs with chronic illnesses and disabilities.

Demonstrated professionalism and leadership

Professionalism and leadership came from every level and no one shirked from the challenges that COVID-19 brought to the LTC world. Researchers brought new information, public health and medical societies shared information and helped with policy recommendations. LTC facilities adjusted as quickly as possible, and there were countless acts of individual professionalism and leadership. Group safety was prioritized but efforts were made to respect individual preferences, and the restrictions that were implemented did save lives.

Vaccinations, once available were widely implemented, even before mandates. And notably vaccination among LTC workers who are often minorities and immigrants—persons who might be appropriately leery of government directives—were ready and willing to be vaccinated.

I am grateful to all who have helped the long-term world cope as well as possible, since the pandemic began.

References

1. Brewer D. Quotes of Mahatma Gandhi, A Words of Wisdom Collection Book Paperback. Lulu.com. 2018.
2. McMichael TM, Currie DW, Clark S, et.al. Epidemiology of COVID-19 in a Long-Term Care Facility in King County, Washington. N Engl J Med. 2020; 382(21): 2005-11.
3. Johns Hopkins, https://coronavirus.jhu.edu/map.html.
4. Chidambaram P. Over 200,000 Residents and Staff in Long-Term Care Facilities Have Died From COVID-19. https://www.kff.org/policy-watch/over-200000-residents-and-staff-in-long-term-care-facilities-have-died-from-covid-19/.
5. CMS Nursing Home Measures. March 12, 2020. https://www.cms.gov/newsroom/press-releases/cms-announces-new-measures-protect-nursing-home-residents-COVID-19.
6. American Health Care Association/National Center for Assisted Living. AHCA/NCAL Guidance: Accepting Admissions from Hospitals During COVID-19 Pandemic. https://www.ahcancal.org/Survey-Regulatory-Legal/Emergency-Preparedness/Documents/COVID19/Hospital-Transfers-LTC.pdf.
7. American Geriatric Society. Letters to President Biden. February 2021. https://www.americangeriatrics.org/sites/default/files/inline-files/Letters%20to%20President%20Biden%20and%20Congress%20on%20Programs%20and%20Policies%20Important%20to%20Older%20Adults_0.pdf.
8. Office of Minority Affairs. August 2021. https://www.americangeriatrics.org/search/ags-sites?keys=office+of+minority+affairs+August+2021.
9. Stulick A. New CNA, LPN Contracts Raise Nursing Home Wages Across United States. June 6, 2021. https://skillednursingnews.com/2021/06/new-cna-lpn-contracts-raise-wages-and-labor-costs-across-united-states/.
10. D'Adamo H, Yoshikawa T. Coronavirus Disease 2019 in Geriatrics and Long-Term Care: The ABCDs of COVID-19. J Am Geriatr Soc. 2020 May; 68(5): 912-7.
11. Ouslander JG. Society for Post-Acute and Long-Term Care Medicine, the American Health Care Association, and the National Center for Assisted Living Joint Statement. April 3, 2020. State Advisories re: Hospital Discharges and Admissions to Nursing Homes and Assisted Communities. https://agsjournals.onlinelibrary.wiley.com/doi/full/10.1111/jgs.16464.

12. Social Isolation—the Other COVID-19 Threat in Nursing Homes. JAMA. 2020; 3 24(7): 619-20.
13. Kasar KS, Karaman E. Life in lockdown: Social isolation, loneliness and quality of life in the elderly during the COVID-19 pandemic: A scoping review. Geriatr Nurs. Sep-Oct 2021; 42(5): 1222-9.
14. Cher CH, Donato-Woodger S, Dainton CJ. Competing Crises: COVID-19 countermeasures and Social Isolation Among Older Adults in Long Term Care. J Adv Nurs. 2020 Oct; 76(10): 2456-9.

Chapter 4

Disabusing disability: Demonstrating that disability doesn't mean inability

Oluwaferanmi Okanlami, MD, MS

Disability is regularly neglected in conversations about diversity, equity, and inclusion (DEI), yet it is the one demographic that we may all identify with one day. Therefore, disability could serve as a means of demonstrating that we are all much more similar than we are different. As a disabled, black, Nigerian, immigrant, cis-gender heterosexual, male, physician, athlete, I have a unique vantage point from which to define and defend personal and professional identity formation, through a framework of intersectionality.

Disability is not inability. By allowing people to demonstrate what they can do, rather than attempting to limit them based on what they can't, each of us has influence to make sure we are not perpetuating ableism, racism, or any other-isms, in our personal, academic, and professional lives.

I use he/him/his pronouns. I'm a young to middle-aged Black man with brown skin. I wear glasses. I have short black hair, I've got a wooden bow tie with a blue collared shirt and a blazer. In my background, you can see white walls, a few diplomas, a colorful quilt and a plant. The reason that I give a visual description is because especially during the COVID/Zoom meetings era—but even prior to it—we fail to recognize individuals who cannot see what someone looks like are unable to fully participate in many presentations. Understanding what a speaker looks like or getting a visual description of the slides being presented provides additional contextual framework that allows one to participate more fully. I must admit that it wasn't until this past year that I was introduced to this myself. So now I try to provide context and a visual description every time I give an introduction.

I also start by telling people that I don't like giving talks. Anyone who knows me will immediately chuckle because they know that I love talking. But I didn't say I don't like talking. I said I don't like giving talks. What I like to do is start conversations.

Figure 1 is an image that has two halves, where three people are watching what appears to be a baseball game on the other side of a fence. On the left side of the image, there is a tall individual, a medium height individual, and a short individual, and each of them is standing on one box such that the tallest individual can see over the fence, the medium height individual can see over the fence, but the shortest individual cannot see over the fence while standing on one box. Under this side it says the word "Equality." On the other side, the tallest individual now has no box and can still see over the fence, the medium height individual is still on one box and can see over the fence, but now the shortest individual is on two boxes and can also see over the fence. Under this side it says the word "Equity."

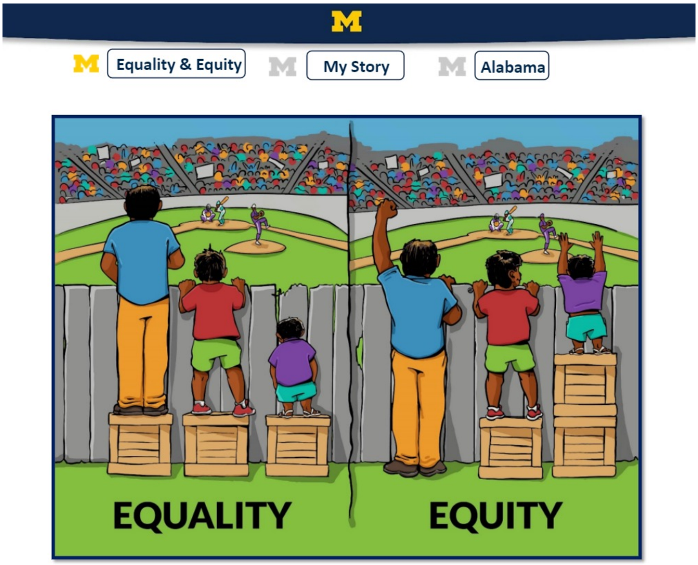


Figure 1: January 13, 2016 — http://interactioninstitute.org/illustrating-equality-vs-equity/ Image Cred: Angus Maguire

This image is often used to talk about how equality and equity are not the same things. People feel as though equality is giving everyone the same exact thing, whereas equity is what it is that they need. There are many different iterations of this slide and many responses to it. Some say, "Why don't those people buy tickets like everyone else, and watch the game from inside the ballpark?" We must recognize that what one person sees when looking at an image or scenario is not necessarily the same thing that other people see. This is not to justify one person's perception, but to validate the fact that those perceptions exist. It's to recognize that all of us come to conversations with our own views and our own perspectives, and in order to understand how we're going to move forward as an institution, as a community, as a country, we must recognize the fact that not everyone is seeing the same thing when looking at the same image.

In contrast to the prior sentiment, people also say, "There should be no fence in the first place…the fence is the barrier, why do we have fences at all? If we remove the fence, then there would be no problem, and equity and equality would not be an issue, so just take down the fence."

In those iterations without the fence, the word under the image is often "Justice."

One time there was a softball player in the audience who raised their hand and said, "The fence is not there to keep people out. The fence is there to keep things in. If we don't have a fence, there's no way to know what a home run is. If we don't have a fence and there's a busy road on the other side of the field, we put ourselves at risk every time we run across that road to retrieve the ball. But we love it when people come and watch our games, so we have no interest in excluding people." In situations like this people begin to offer solutions like, what if we had a chain link fence? What if there was a plexiglass wall?

The point is, we are never going to come to a shared goal unless we talk to people on both sides of that fence, because in order to achieve what we want as a mutual goal, we must understand what each side's goals are first, before we can offer a solution for how to achieve them. If it is a mutual goal for the people inside and outside of the fence to have access to see the game, then great. But we need to hear from people on different sides of the fence first, because you may be surprised by the responses that you get. Some may think the people outside the fence are intentionally being kept out unless you talk to the people inside who know what the original purpose of the fence was meant to be.

Using cartoon characters, boxes, and fake sporting events is much easier than talking about the real-life decisions that we make in our institutions. If you look at the boxes as institutional resources, there are three boxes on either side of this image, meaning that all it takes is for institutional resources to be allocated differently for equity to be achieved. However, some people will say, "Why does that tall individual have to give up their box for the shorter one? It's not that tall person's fault that that other individual is short. They worked hard for their box, so they shouldn't have to give it up." In this situation, we're looking at re-distributing one box, but our reality is more like this.

In Figure 2, there is a third image where the tall individual is standing on seven boxes and is well above the fence and the shortest individual is standing in a box sized hole. In this image, when we talk about health systems, there is a clear distinction between the haves and the have nots. I am not going to criticize the tall individual with the multiple boxes, because it is very likely that they did work very hard for each one of the boxes that they're standing on. But they may have also started from a position of privilege where they didn't recognize the fact that having some of those boxes was because of harmful acts that people before them committed. Or that having some of those boxes was purely based on the family in which they were born in, the country they were born in, and/or the abilities that they were born with.

Then, for the shortest individual standing in a box sized hole, they did not necessarily dig that hole for themselves, even though people may look at them and think that they put themselves there, and therefore should be responsible for pulling themselves out of the hole.

It is often difficult to get people to understand how DEI plays a role in every single decision made on a day-to-day basis.

Figure 3 represents the diversity of opinions, perspectives, and positions. If you were to present a wheelchair user with one of those boxes, it would not result in the same level as access for them. In a presentation to pediatrics and OB/GYN departments, one individual said, "I don't see anything wrong when looking at these

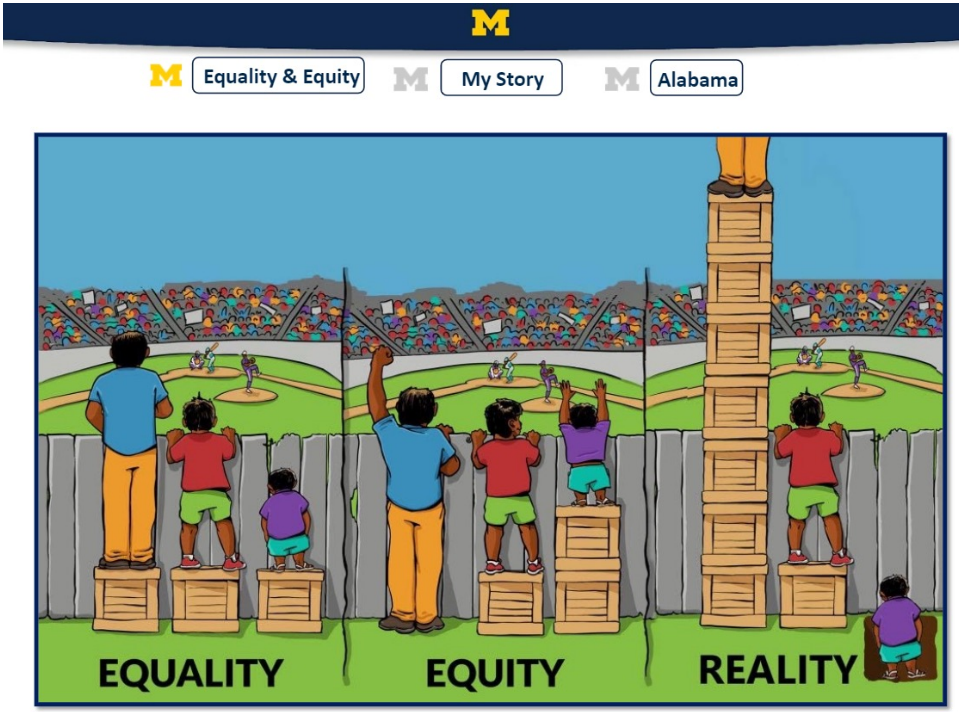


Figure 2

first images, because it clearly represents a family, and the younger child shouldn't have the same access as the older child; the father should clearly have more access to resources than both of his sons. Therefore, this just represents the lifespan." In this same conversation, someone else said, "How do you know that the shortest individual doesn't have achondroplasia, or short stature?"

The structures that we operate in were not built with everyone in mind, and we don't always recognize who's being excluded until we take time to talk about who is, and isn't, present. This last image does a good job of trying to recognize that because the other images often get criticized for saying that it represented three men. This slide addresses the need to recognize race and gender. And, by including a wheelchair user, it also addresses disability. This slide also includes a rainbow in the top right corner, which represents the LGBTQIA+ population.

This demonstrates that the resources needed may need to be distributed in different ways. It shows that if you were to take some of those boxes, and instead use the wood to build a ramp, you would provide more access to the people who need it. The resources that are needed are not always the same, but you must also engage with the people on both sides of the fence to find out what resources are needed.

We must also acknowledge that not everybody wants the same thing, and there will be time times when we discover that we are fighting an uphill battle because people do not think that each person deserves to have that same access, and some people don't feel they should be responsible for giving up their box for someone else. Regarding disability, some people don't want to use the wood to build a ramp even though it often doesn't cost any more to do so. But even when it does take more resources to make things more accessible, it doesn't mean that the accessibility should be ignored. It takes an investment in resources to make sure our most disadvantaged and marginalized populations get the equitable access to the resources that they deserve and need. This is a simple way to invite people into the conversation, to have them recognize things that they may not have seen before. Many of us come to this conversation from a place of humility, of authenticity, and of vulnerability to say that we did not always acknowledge the people that were left out of some of these images.

When we think about medical education, leadership, and professionalism, are we actively including all our stakeholder groups? As medical professionals, when we are teaching our trainees and interacting with our colleagues, are we doing so in a way that demonstrates a desire to be inclusive and supportive of all people?

A disproportionate impact

Over the past year, we have also had a reckoning with racial injustice and have begun to more formally acknowledge the fact that there are certain populations that have been disadvantaged for quite some time. The COVID-19 pandemic has had a disproportionate impact on very specific communities, and even outside of

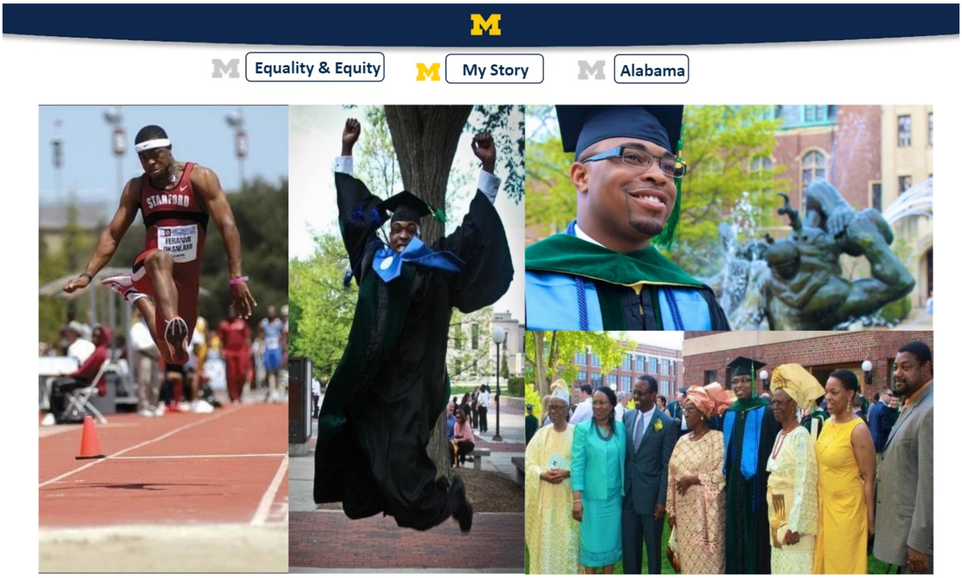
Figure 3

COVID, the reckoning with how Black lives have been treated in this country is not something that we should be proud of. One of my favorite sayings is, "The past may not be your fault, but the future will be."

When we have an opportunity to acknowledge what the past has been in order to work together to change the future, we need to do so. It is not trying to dwell on the past or point fingers about the things that happened, but as a Black male physician, it's impossible to separate my physician life from my Blackness, and the way that I have been treated my entire career was elucidated this year as people began talking about diversity, equity and inclusion in a much more direct way. This is not an aside to distract from today's conversation about disability, but rather an intentional desire to also recognize that Black and brown communities are not the only ones disproportionately disadvantaged by the COVID-19 pandemic, highlighting the effect that intersectionality has on individuals with multiple marginalized identities.

Data shows that about 20 percent of the U.S. population at any given time has a disability, and that is likely grossly underestimated because people don't always disclose disability for many reasons. People usually assume I am referring to visible or physical disabilities, but not all disabilities are visible, and there are many non-apparent or invisible disabilities that continue to have an impact on the way people have, or do not have, access in this world.

I am from Nigeria, and both of my parents were physicians. My mother was a pediatric intensivist, and my father was a neonatal intensivist. We moved to the U.S. when I was young, and they had to redo their residency training because their training was not recognized in the U.S. Both of my parents went to Howard University to do their pediatrics residency for a second time. My mother then went on to Johns

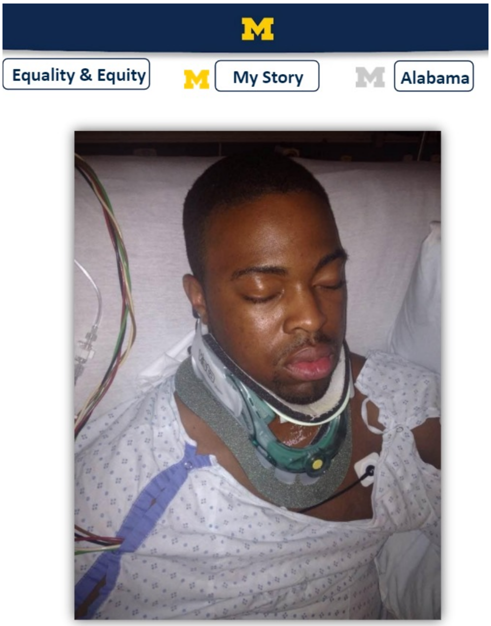


Hopkins for her pediatric critical care fellowship, and my father did his neonatal intensive care fellowship at Georgetown.

We then moved to Indiana where I went to elementary school, and then I went to western Massachusetts to Deerfield Academy for high school. In high school, I played basketball, soccer, lacrosse, and track and field; I was the president of my class, captain of multiple varsity teams, and leader of many student groups. I went on to Stanford University for my undergraduate degree where I continued as a student athlete, running track and field all four years. I was an academic All-American and the captain of the team my last two years. Instead of taking a year off to train for the Olympic trials, I went straight through to the University of Michigan for medical school, because my Nigerian parents had different plans for my career trajectory. I then spent four wonderful years at the University of Michigan before matching into orthopaedic surgery residency at Yale.

On July 4, 2013, I jumped into a pool, and broke my neck, resulting in a C-6 incomplete spinal cord injury, and paralyzing me from the chest down with very minimal use of my upper extremities. I was a third-year orthopaedic surgery resident at the time, and it was my residency classmates that were on spine call that day. So, my own colleague had to be the one to then do the trauma evaluation on me as I was wheeled into the trauma bay.

Prior to this time, I had no idea what disability was like, even though I was a third-year orthopaedic surgery resident who took care of patients with disabilities. I saw numerous patients in post-operative visits, yet I had no true idea what life was like as an individual with a disability. I did not realize how I had unintentionally been complicit in perpetuating a world of ableism that was not built for individuals with disabilities.



Ableism and racism

Now, I juxtapose ableism and racism when I have these conversations, because these are words that make people uncomfortable because people think that acknowledging racism means you are a racist, that you are a bad person. Racism, however, is a systemic construct, and that whether we agree with this or not, it was the foundation upon which our country was born. Because of this, racism still has effects that can be felt today. There were things that people did based solely on race; we differentiated people in class based on race; we enslaved an entire race of individuals. Therefore, the impact of racism still exists, even though it's not referring to specific individuals and calling them racist.

Acknowledging and identifying racism versus calling someone a racist are different things. Similarly, ableism is the pure fact that our world was not built for people with disabilities. There is nothing that has changed about who I am, other than the way that I get around, which is now using a wheelchair. I tell people that even though I've been a Black man my entire life, I've only been a disabled man for the past eight years. In those eight years, however, I have felt the most underrepresented, marginalized, disadvantaged, and discriminated against. Despite all the degrees, the accolades, and what I have accomplished; despite being one of those people who had been standing on multiple boxes thanks to my two physician parents, prep school education, and Stanford, Michigan, and (honorary) Yale degrees; despite all the resources provided to me, it was still possible for people to exclude me and make me feel less than.

People did not want me in their establishments, or so it felt when there was no accessible entry. People did not want me sitting next to them for fear of "catching" whatever it was that I had. This was a completely new feeling for someone who had previously felt as though they were in "the club" with everyone else.

I then saw the way that we treat our patients with disabilities. I saw the way that we don't have accessible clinic spaces, even in our hospitals where we should know how to take care of individuals with disabilities. At best, we end up scrambling anytime someone shows up in a power chair; scrambling anytime someone needs an American Sign Language interpreter for a clinic visit; scrambling whenever someone comes in with a cognitive difficulty that makes it such that we must slow down our communication to make sure that they're comprehending what we're trying to deliver to them in a 15-minute clinic visit.

In health care we seem as though we don't have enough time to take care of the very patients that we say we're supposed to be taking caring for.

After I had my injury, I did my inpatient rehab at the Rehabilitation Institute of Chicago (RIC), now called the Shirley Ryan Ability Lab. After my acute inpatient rehab, I was blessed with some motor return and eventually went home to Indiana to continue outpatient therapy. During this time, I got a Master's degree from Notre Dame in Engineering, Science, and Technology Entrepreneurship, was appointed to the St. Joseph County Board of Health by former mayor Pete Buttigieg, and worked with the adaptive sports program in our community. I had never heard of adaptive sports at that time. Adaptive Sports have historically been thought of as sports for people with disabilities. But I have been trying to demonstrate that adaptive sports are truly just sports that allow everyone to participate, regardless of disability. I was introduced to adaptive sports at RIC, and have continued to remain involved.

A standing frame chair is just one example of the types of accommodations, or "boxes" that I was provided that allowed me to return to medicine. I completed a family medicine residency. Rather than judging me based on what people thought

I could not do, they worked with me and allowed me to demonstrate what I could do. I delivered babies, performed full spectrum primary care from taking care of patients in the nursing home to delivering babies, and managing critically ill patients in the ICU. I have done cardiac catheterizations using this chair. We had to sterilize the chair and figure out how to get me gowned and gloved appropriately.

These accomplishments are things that people thought would not be possible, not just for me, but because people thought there was no way a wheelchair would be permitted in the operating room. Many people felt that there was no way that someone with a disability could be a surgeon. There's no way someone who has limited dexterity in their hands because of a C-6 incomplete spinal cord injury will be able to operate a catheter, or be able to maneuver a needle, but once again, I was given the opportunity to demonstrate what I could do because they assumed competence.

Too often when people think of disability, they assume it means inability. We look at someone and assess what we think they're able to do, and then we limit the opportunities that they get because we think we are helping them. We think we know the quality of life that they're going to have. Dr. Lisa Iezzoni et al. demonstrated that physicians, when asked to rate the quality of life of their patients with disabilities, rate them much lower than her patient's feel about the quality of their lives. Because we must make decisions about what treatment options we are going to present to our patients, deciding what therapies we're going to give them based on what we think is reasonable versus what we think may be futile, we continue to perpetuate these misconceptions. We look at individuals with disabilities and make decisions about their lives, not valuing their lives in the same way.

I had to recognize that I did not see individuals with disabilities the way that I now see myself. I know what I probably thought when I saw someone roll by in a wheelchair, and this is coming from someone who was raised in a diverse set of places, with the belief that God created us all in His image. My parents did not talk about diversity as a buzzword; they lived diversity, equity, and inclusion, because that's just what was in our communities. Coming from Nigeria, to Maryland to Indiana, to Massachusetts, I was in all different types of settings with all different types of people, and I just learned to see people for people, as cliche as that sounds. My parents did not recognize racism when people did things to them, because they did not realize that their Blackness was such a problem in this country. The first thought they had was that maybe the mistreatment was because they were Nigerian immigrants. They started to learn about racism after they came here, and I started to learn about ableism, after I experienced it myself. However, it shouldn't take being a disabled Black physician to understand the ills of racism and ableism in our country. And it does not mean that we are at fault for creating them, but we are at fault for perpetuating them when we do not create the access and opportunities that everyone deserves.

Leadership in COVID

Leadership looks like different things, especially in medicine. We don't always recognize the opportunities that we have as physicians—to be a mouthpiece and a megaphone for our communities to hear things in a different way. I've had the blessing of being on ABC, MSNBC, CBS, and with the 30th anniversary of the Americans with Disabilities Act, July 26, 2020, there was a lot of conversation around what we were going to do for the disability community, given the disproportionate impact COVID had on them.

In health care settings and in academia, we have begun to recognize that there were things that already disproportionately disadvantaged the disability community that we were not paying attention to, and the pandemic heightened those disproportionate disadvantages. But, what we're trying to show people is that we don't have to pivot all the way back to where we came from, and let the pendulum swing the other way. There are certain things that we recognize we could have done before. For example, while telehealth is not appropriate in every setting, it is absolutely something that certain populations would have benefited from had we made the opportunity more widely available before the pandemic. If we were able to do more home visits, if we were able to provide opportunities for people who may not have been able to get into our inaccessible clinics, we would have been able to close some gaps.

In proving accommodations for the disability community often results in something that benefits more than just the individual with the disability, I often say, "everyone can use the ramp, while not everyone can use the stairs." What we should be doing is building more figurative ramps to create access for everyone. Because whether you're the parent with a stroller, the person with a spinal cord injury, or the individual delivering a grocery shipment, having that ramp provides access in a way that doesn't take access away from someone else.

However, the number of places that I still go that are not physically accessible, shows how far we still need to go. There is no excuse for any health system that we work in to be one of those places because it demonstrates to stakeholders in our communities that disability is not something that is prioritized. We could argue that every single person who comes to see us has some sort of temporary or permanent disability, in some way.

A group out of Yale has created a standardized patient experience, where the patient was a young man with a disability. There's no reason why we cannot have someone with a disability come in as the standardized patient for the pulmonary exam and not have the focus be that they are a wheelchair user. Students are continuously saying that they are not prepared to address disability when they get out into the workforce, because, unfortunately, it was not something that they saw as a student. At the University of Michigan, we've put together all sorts of work with individuals with disabilities. I'm blessed to have had a chair (Dr. Philip Zazove), who is a deaf provider. There are providers across the institution, like Dr. Karin Muraszko (AΩA, Columbia University Vagelos College of Physicians and Surgeons, 1981), who is the chair of neurosurgery, who is also a wheelchair user. There are other physicians who show that having a disability does not preclude one from being a qualified physician.

We should teach our students to see us as peers, and to recognize that not only can their classmates with disabilities be physicians, but that their patients with disabilities should not be treated any differently.

For me, being a patient and provider just depends on what side of the stethoscope I'm on that day. I am no better and no more important than my patients. I see this as a team. We each bring information and knowledge to the team which helps us make decisions. We need to reconceptualize what these equitable opportunities can be.

Adaptive sports

I was introduced to adaptive sports during my inpatient rehabilitation. At the University of Michigan, we've had the opportunity to create an adaptive sports and fitness program with a goal of providing equitable access to physical health and wellness for individuals with disabilities. Even prior to the pandemic, we recognized that there were not enough opportunities for patients to get physically fit. When people in health care hear me talk about adaptive sport, they automatically assume this belongs in the athletic department, or in the recreational sports division, but they fail to recognize that every single patient could benefit from adaptive sports. In orthopaedics for example, there are many people who have been told they need to lower their BMI before having surgery, but believe they have no means of exercising because of their knee or hip pain. Adaptive sports provides an avenue for those individuals to get their exercise by starting to play a wheelchair sport. Patients don't know that they can still be physically active from a wheelchair, whether it's because they're temporarily in one, or whether it's because they live their entire lives in one. Kids in schools are not introduced to adaptive sports; we put them on the sidelines and let them be the manager or the scorekeeper. But we don't recognize the fact that these young students could grow up to be Paralympians.

At the University of Michigan, we revamped the technical standards for admission to reflect the fact that the practice of medicine is an intellectual exercise that requires certain technical skills that can be achieved with reasonable accommodations. This goes back to the standing frame wheelchair I was given. It goes back to assuming competence, rather than judging people by what we think they cannot do. We bring people into this medical school and commit to training them to be physicians. We know that we do not have to create pluripotent stem cells that can differentiate into any specialty in the world.

In its first year of full competition, the University of Michigan adaptive sports and fitness program went to the wheelchair tennis national championships. We adhered to all the COVID precautions; we were tested on a weekly basis, had our own little bubble of a program just like other varsity athletic programs, and made sure to create an environment that reduced the risk of transmitting COVID.

We make sure these student athletes who live with a variety of disabilities (spinal cord injury, spinal bifida, osteogenesis imperfecta, and cerebral palsy) are able to get an education pursuing various undergraduate and graduate degrees.

The Adaptive Sports and Inclusive Recreation Initiative (ASIRI), is embedded into the curriculum of the PE programs in Ann Arbor. Adaptive fitness has

Re-Conceptualizing Equitable Opportunities

Adaptive sport is inclusive of everyone

partnered with our local center for independent living to renovate a gym to make it accessible for the Michigan patient population. The Adaptive Sports Student Interest Group, is for university students with, and without, disabilities who are interested in participating in this work. The four competitive sports offered are wheelchair tennis, wheelchair basketball, track and field, and para-equestrian. One student-athlete took gold in the high jump at the Tokyo Paralympic games just weeks after starting his first year of medical school. Two other athletes were alternates for Tokyo, one from the para-equestrian program and the other from the track and field program.

Building ramps

As physicians we can have impact in different spaces and in different ways. If we recognize that regardless of whether it's in the clinic, or the nursing home, or in the community, we can use our medical degrees and our education to create opportunities and to build ramps. At times it may feel like people don't see the work that you're doing, but I was lucky to be honored by President Biden for serving the community during the pandemic. I ran University of Michigan's COVID hotline. As a family medicine physician, I oversaw a group of nurse practitioners and PAs. In those early days, we were fielding calls and didn't really know much about what was going on.

I have since transitioned from that to a role as Director of Student Accessibility and Accommodation Services at the University of Michigan, while maintaining my faculty appointment as an assistant professor of family medicine, physical medicine and rehabilitation, urology, and orthopaedic surgery. I serve as the Disability Issues Representative on the Group on Diversity and Inclusion at the Association of American Medical Colleges. I sit on the Council for Medical Legislation at the

National Medical Association, appointed by Dr. Leon McDougal (AΩA, The Ohio State University College of Medicine, 2018, Alumnus). I do not say these things to pat myself on the back but as an example of how disability is not inability.

None of these things were done by my hands alone. These were all things that were done because people provided opportunities. People provided resources. And people looked at individuals with disabilities in this community and did not look away from them. They did not say that it was going to be too expensive. They instead looked and asked, “How can we help? How can we build ramps to make sure someone’s tomorrow is better than their yesterday?”

Chapter 5

I didn’t sign up for this…did I?: A medical school’s response to a global pandemic

Mark Whipple, MD, MS and Kellie Engle

As the new year dawned in 2020, the faculty, students, and administrators at the University of Washington School of Medicine (UWSOM) in Seattle, were engaged in all of their usual jobs—educating a generation of trainees; caring for patients; and pursuing research. The UWSOM is even more complex than most, as it serves Washington, Wyoming, Alaska, Montana, and Idaho. More than 1,000 medical students and 5,000 faculty were spread out across campuses at the University of Washington, Gonzaga University-Spokane, University of Wyoming-Laramie, University of Alaska-Anchorage, Montana State University-Bozeman, and University of Idaho, and at more than 180 clinical sites stretching from the border of Nebraska to the border of Russia.

On January 21, the first case of COVID-19 in the United States was reported in Everett, WA, just north of Seattle, and on February 29 the first COVID-19 death in the U.S. occurred in the Seattle suburb of Kirkland, WA. The UW Medicine health care system began to prepare for the coming surge. Little was known about the specifics of transmission risks, and personal protective equipment (PPE) was in short supply.

Over the next several months the UWSOM faculty and administration were faced with a series of difficult decisions. Should we pull students from clerkships? Should we transition to virtual classroom teaching? Should we shorten clerkships? Should we switch to pass/fail clerkship grading? How do we keep students on track to graduate and also receive financial aid? These questions led to more questions that also needed answers. How do we lead when we really don’t know where we’re headed? How do we provide confidence in times of uncertainty? How do we balance professional responsibility with public health, students’ education, and the physical safety and mental health of students, faculty, and staff? And, how fair is it to depend on everyone’s sense of professionalism when many of the patient needs exceed typical professional obligations?

Values

In a time of rapidly shifting circumstances, it was critical to set guiding principles on which to base the many decisions that were needed. It was going to be impossible to predict every conceivable issue, so we decided to have a common set of values on which decisions could be made. We hoped that this would allow for some consistency and predictability in the coming months. Our guiding principles were

1. Keep our students, faculty, staff, and patients safe; and
2. Provide the education necessary for students to become competent physicians and graduate on time.

There were times when these principles would come into conflict. Did the risk of caring for COVID-19 patients outweigh the educational value? How did the availability of PPE or vaccines affect this calculus?

Student clerkships

By mid-March students on surgery and anesthesiology clerkships were being excluded from surgical cases at a number of our key hospitals, in order to preserve PPE. This was an example of where the educational value of participating in a surgical case was outweighed by the need to prioritize the use of short stocks of PPE.

While we worked with our clerkship directors to develop alternative educational activities, student education was becoming increasingly impacted. We reached out to the clinical leadership and front-line educators to gain insight into the potential role of students in the clinical environment. While some health care systems involved students in the care of COVID patients, in Seattle, even residents were being removed from the care of some patients to maintain PPE. Moreover, our widely distributed system of clerkships would make it challenging to train students into a new clinical system every four to six weeks.

Ultimately, the decision was made collaboratively in discussions with frontline clinical faculty, leadership and colleagues at other institutions that were facing similar situations. One could take issue with how best to balance safety and education, but being clear that both were thoughtfully considered allowed everyone to accept the approach being taken.

Regardless, this was still an unnerving decision. Were we overreacting? Was this just an isolated outbreak and we were unnecessarily denying students valuable clinical opportunities in a misguided urge for safety? As physicians they would face similar situations in their career and should we allow them the educational experience that comes with a public health crisis? We felt a sense of relief when our decision was validated by the AAMC the following week with their recommendation that students be removed from clerkships.

Communication

In order to make and implement decisions, accurate information and clear communication was essential. Unfortunately, the evolving nature of the pandemic, scant early information regarding the COVID-19 virus, and the complexity of our highly distributed medical school made obtaining up-to-date information extremely challenging. Early on, there was incomplete data around the risk of transmission and effectiveness of PPE to protect patients, health care workers and the public. We relied heavily on our infectious disease experts and the Institute for Health Metrics and Evaluation at the University of Washington to provide current understanding of the virology and epidemiology of the COVID-19 pandemic. The continued lack of disease transmission between appropriately masked patients and providers gave evidence to support the decision to return students to clerkships and allow for in-person clinical skills and anatomy teaching. However, the six universities in five states, were each implementing their own somewhat different policies that needed to be followed. Some universities discontinued in-person classroom teaching while in-person teaching continued at others. Some states and health care systems required two-week quarantines between entering the state and starting a clerkship, necessitating complex adjustments to clerkship schedules. To keep on top of all the constantly shifting sands, we depended on frequent communication with medical directors, provosts' offices, and state legislatures. National organizations such as the Coalition on Physician Accountability were extremely helpful in coordinating national recommendations across medical schools and residency programs around issues such as away rotations and virtual interviewing.

In addition to communication from the front line decision-makers, we also needed to deliver this information and our own decisions to our students, faculty and staff. Anxiety was high everywhere. Many faculty were exhausted from providing front-line care to COVID-19 patients. Students were concerned about their own safety and that of their families while also being worried about the quality of their education and whether they would be adequately trained. Staff were concerned about the stability of their jobs in the setting of mandatory furloughs, and about their own safety as vaccines were first made available to clinicians and students before administrative staff. School closures also resulted in challenging child-care situations throughout our community.

Zooming in

We determined that frequent communication would be essential in order to provide needed information as well as to acknowledge concerns and provide reassurance that decisions were being made with the appropriate values and priorities in mind. We initiated a series of twice daily Zoom huddles amongst the academic affairs teams to communicate what we were all hearing from stakeholders, and to coordinate responses to scenarios that could be changing hourly. Every night, we held a Zoom huddle with clerkship directors and administrators, academic affairs deans and staff, and student representatives.

While this was initially envisioned primarily as a means to provide status updates to clerkship leadership, it soon began to serve as a forum for the clerkships to bring forth issues that they were experiencing and share responses. It allowed clerkships to raise questions and concerns to the academic affairs leadership and provided a reliable space to troubleshoot and brainstorm approaches. Many expressed the psychological value of feeling "in the loop" even when answers weren't readily available. It became clear that it was going to be important to be transparent about what we did know, and what we did not know.

We implemented frequent Zoom town halls with students to provide updates, share the decision-making process, and solicit questions and concerns. We set up a dedicated e-mail address for student inquiries and answered hundreds of individual questions.

Our communication team created a dedicated website and we sent out daily (and then weekly) newsletters with updated information and answers to common questions. Trying to keep information up-to-date and avoid contradictory information was a key task for our communications team. We even obtained PPE and mailed this to students spread out over a quarter of the geographic U.S.

Decision-making processes

Throughout the pandemic we were faced with different types of decision-making processes, and it was important to appropriately determine which decisions needed which process. Some decisions came from states and universities and the challenge was one of communication and implementation. Some decisions required interpretation of existing policies and procedures and could be decided within a unit or by a dean or director (with input from other appropriate parties).

Larger decisions, such as whether to pull students from clerkships, required balancing the core principles of safety and educational value with transparency as to how, why, and by whom the decision was made. There was also a set of decisions that for the school were beyond the level of an individual and required the approval of the existing governance structures. These were decisions that affected graduation requirements, such as whether to shorten clerkships or provide credit for non-clinical electives in place of clinical electives. It also included decisions as to whether to change to pass/fail grading for required clerkships and allow Step 1 to be taken after the year of core clerkships rather than before. These decisions were understandably of intense interest to students, faculty, and administrative teams, and fell within the purview of the curriculum committees and the Faculty Council on Academic Affairs.

Fortunately, most of these large decisions allowed for time to deliberate and solicit input from all stakeholders. We utilized the clerkship huddles to bring groups together to work through these issues in an informal manner. This allowed the parameters of a decision to be crafted so that student representatives could poll their peers and provide a student voice. In this way, large complex decisions could be brought to governing committees for deliberation with the key issues, choices and pros and cons clarified. None of these decisions were easy and the outcomes often resulted in differences of opinion as to what was the best course of action. Perhaps even more important than any of the individual decisions themselves, was trying to ensure confidence in the process. At the end of the day, even those who disagreed with a particular outcome were able to feel that their voice had been heard, their opinion thoughtfully considered, and the decision made with a sincere belief of what was best for our students.

Professionalism

Throughout the entire pandemic many faculty, staff, and students exhibited remarkable and humbling demonstrations of professionalism, dedication, and compassion. When we pulled students from clerkships for an entire quarter, we needed to provide coursework to allow students to remain on track to graduate, provide educational value, and allow students to continue to receive financial aid. In eight days, the faculty team responsible for the health systems science course developed a full-time, month-long course that could be delivered remotely to more than 600 students.

Using the ongoing pandemic, this course taught about the response of health care systems; issues around systemic health inequities that were being exacerbated; the ethics of crisis care decisions; the evaluation of quality care; and other relevant topics. In addition, faculty from across departments rapidly developed two- to four-week virtual clinical electives that would allow the students to continue their education for the three months that they were out of clerkships. These electives included topics such as radiology, pathology, laboratory medicine, global health, medical informatics, research methods, and arts and humanities for clinicians. The two-week in-person transition to residency course that includes dozens of faculty and individual sessions was quickly converted to an online format. Pre-clerkship faculty rapidly recorded hundreds of video presentations and acquired expertise in online small-group teaching. Clinical skills and anatomy faculty figured out ways to teach and assess while maintaining proper mask use and social distancing.

In the midst of mandatory furloughs, staff quickly adjusted to working remotely and ensuring compliance with all the modifications to policies, procedures, and graduation requirements. For the enterprise to succeed we were depending on the professionalism of our colleagues to go beyond their actual professional obligations. And without exception, the members of our communities stepped up to meet the challenge. It was a privilege to serve such selfless and committed professionals. We were forced to confront the question of “when is viable good enough?” Unfortunately, there may have been times where we overreached to try to match something of pre-existing quality and in the process risked burning out dedicated educators and staff.

Lessons learned

The pandemic is still with us. Vaccine availability has allowed us to go back to many pre-pandemic procedures, yet the variants continue to impact many aspects of our day-to-day patient care, educational, and administrative activities. While we are glad to be back to a somewhat greater sense of normalcy, there are lessons from our experience that we intend to continue.

We learned the importance of identifying values and the need to use these values as a guide when facing difficult choices.

We recognized the importance of transparency of decision making and process, even if it means showing how "the sausage is being made".

We realized how technologies such as Zoom can help flatten hierarchies and bridge geographic distances. We intend to keep many of our governance committee meetings as Zoom only, thereby allowing members from different regions to participate.

We recognized both the value to wellness of in-person community and the importance of flexibility around remote and asynchronous learning. We identified where distance learning can be effective (content delivery and participation in sessions by students from different regions) and where it does not work so well (anatomy, clinical skills teaching, Objective Structured Clinical Examinations). By being forced to consider what in-person teaching was indispensable and what could be taught via other means we are more fully able to commit to active learning. We have been required to consider what is most critical to maintain in the clinical learning environment, especially when there are pressures on time and access. With wider adoption of tele-health, we are actively working to incorporate tele-health concepts into the curriculum to a greater degree.

We have tangibly realized the challenges that many medical students, staff, and faculty face regarding health care, care of family members, commuting, financial and job stressors, and have worked to be more accommodating.

On a national level, we have wrestled with whether we should move toward virtual interviews and away from multiple away rotations. While this could result in greater savings in time and financial resources for travel and housing, does this negatively impact the likelihood of finding a good match between student and residency program?

Most importantly we have learned to trust in each other and to value the professionalism and commitment that each of us brings to the task of training the next generation of physicians.

Chapter 6

Medical education and professional identity formation in the COVID-19 pandemic: Reflections from future physicians

Emily D. Geyer, MD; Elizabeth A. Stein, MD; Douglas S. Paauw, MD, MACP; Sheryl A. Pfeil, MD

> My eyes already touch the sunny hill, going far ahead of the road I have begun. So we are grasped by what we cannot grasp; it has its inner light, even from a distance—and changes us, even if we do not reach it, into something else, which, hardly sensing it, we already are; a gesture waves us on, answering our own wave...but what we feel is the wind in our faces.
>
> —Rainer Maria Rilke[1]

The impact of the COVID-19 pandemic on undergraduate medical education, unprecedented in the era of modern medicine, introduced serious challenges to learners and their progression through medical training. Within weeks of the first detected cases of the SARS-CoV-2 virus in the United States, learners were pulled from clinical rotations, United States Medical Licensing Exams (USMLE) were cancelled or postponed indefinitely, and preclinical students transitioned to online learning. Medical students were thrust into an arduous, ambiguous period that raised critical questions about medical education: what does it mean to be a medical student when health care systems are strained and medical education is paused or no longer a priority, and how would the pandemic shape the development of students into physicians?

Later, even as masking and testing measures enabled in-person clinical learning, students, particularly students of color, faced compounded stress and professional identity tension as a renewal of the Black Lives Matter movement swept the United States into a period of national reckoning in the summer of 2020 and beyond. On clinical clerkships, learners encountered a dramatically changed clinical landscape in which educational opportunities were abbreviated or unavailable, raising questions about preparedness for residency and the role of evaluation metrics in their medical education.

The effects of this radical disruption in medical education were significant and exacerbated the stress of an already demanding learning environment.

Professional identity formation (PIF) is fundamental to the transformative process by which learners become physicians. Creuss, et al., define PIF as, “a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a physician."[2] A shift away from teaching medical professionalism in favor of promoting learners' professional identity formation acknowledges that professional characteristics, values, and norms are not immutable, and that "conditions inside and outside medicine change."[3]

Professional identity formation intersects with ongoing personal identity formation, and therefore is an entirely unique process for every individual; there is no historic standard to which individuals are compared.[4-6] Likewise, professional identity formation encompasses personal identities including gender, ethnicity, class, nationality, race, and sexual orientation, as well their inherent intersectionality.

Professional identity formation is not linear. Critical events such as the first experience confronting death or navigating interpersonal conflict in clinical spaces help facilitate PIF.[4] Self-reflection is also integral to PIF, enabling learners to assess their own values, attitudes, beliefs, and reactions to understand and analyze the value of their experiences.

The initial phases of the COVID-19 pandemic brought disruption, critical experiences and opportunities for self-reflection that led to a pervasive impact on the professional identity development of medical students. It posed significant challenges to medical learners on their journey to becoming physicians. These challenges, while defined by ambiguity, loss, delay, and disappointment, ultimately amounted to formative experiences that catalyzed PIF and accelerated students' transformation into physicians.

By facing these obstacles, students learned how to adapt and found ways to thrive in new and changing environments. They established solidarity across schools, stepped into roles as advocates, educators, and leaders, and were better able to support their patients who felt isolated, alone, and uncertain.

Learners developed strategies to manage ambiguity, setback, grief, and loss—strategies that will be useful throughout their future careers in medicine.

USMLE Step 1 purgatory

The USMLE Step 1 exam is a major milestone in medical student education and career progression. The COVID-19 pandemic delayed medical students' ability to complete this crucial step and move forward in their education by preventing them from taking the exam. Due to social distancing requirements, local government mandates, and nationwide shutdowns in March 2020, testing centers canceled all examinations and closed indefinitely. This experience was distressing to thousands of medical students around the country who had carefully allocated their study time and mental energy to reach their peak performance on their scheduled test date.

Beginning in May 2020, testing centers gradually began to re-open with limited capacity and frequent last-minute cancellations. Stories of test day nightmares circulated on medical student discussion forums. One student's exam was canceled

12 times. Another traveled more than 500 miles for the test only to have it canceled the night before. One student arrived at the testing center on exam day after receiving a confirmation e-mail the night before only to find that the exam had been canceled. Another student's parent was hospitalized with COVID-19 during their dedicated study period, and they subsequently also contracted the virus. The prolonged delays in taking the Step 1 exam resulted in profound stress and took a substantial toll on medical student mental health.

In addition to the challenges posed by the pandemic, the USMLE announced just prior to the outbreak that beginning in 2022, Step 1 would be graded on a pass/fail basis rather than by a numeric score. This announcement left many learners unsure of the importance of a Step 1 score as they wondered whether the transition to pass/fail would be accelerated due to the pandemic. However in March of 2020, the USMLE announced that the transition to pass/fail would not occur sooner, a determination that upset many students who saw the decision as a missed opportunity to show students grace during an uncertain time. Further, many students began clinical clerkships while still studying for Step 1 and struggled to balance these responsibilities simultaneously. The protracted delays in taking Step 1 during the spring and summer of 2020 caused significant distress for many students.

Step 1 purgatory as this period came to be known, introduced significant professional identity tension as learners wrestled with their current role as medical students relative to that of the physicians they hoped to become. The upcoming transition to a pass/fail Step 1 left students wondering whether a high-stakes exam was essential, or whether the emphasis on standardized testing was preventing them from stepping up as community leaders, volunteers, advocates, and researchers. In the setting of the global pandemic, many students wanted to volunteer within their communities by doing things such as working at COVID-19 testing sites, delivering groceries to retirement homes, or babysitting for front line workers. Studying for the exam often interfered or conflicted with their participation in such opportunities.

Students asserted their collective identity and established solidarity across institutions, which fostered their professional identity formation in new and impactful ways. Learners collaborated to write an open letter to the National Board of Medical Examiners (NBME) in May of 2020 to express the impact of the pandemic on students taking the exam. The letter spread across the country, amassing the signatures of thousands of students, as learners sought to convey their experiences and share their frustrations with test administrators.

Medical students demonstrated self-efficacy and adaptability during this time, finding ways to support one another during these challenges. Students transformed the obstacles they faced into opportunities for growth. They found ways to accept change and become more comfortable with uncertainty. Resilience and adaptability became second nature.

The collaboration that students developed during this time will serve as a reminder of the power of collective organizing when facing challenges in their careers as physicians. The optimism and emotional intelligence imperative to coping during Step 1 purgatory accelerated professional development in new ways within undergraduate medical education.

Medical education during COVID-19

Clinical clerkships are a cornerstone of undergraduate medical education, allowing students to interact with patients in the clinical environment, participate on medical teams in a variety of medical disciplines, and advance to the next stage of professional development. These clerkships are a formative time and significantly contribute to career selection.

The COVID-19 pandemic disrupted the standard medical student educational experience on clinical rotations. It rapidly evolved in the spring of 2020, interrupting the clinical education of students on the wards. It continued to be omnipresent through the summer, when third-year medical students would traditionally first enter the clinical environment. Medical schools delayed the start of rotations for several months for the sake of student safety. Administrators struggled to strike a balance between allowing students to serve on the front lines with protecting new learners from exposure to a potentially lethal risk.[7]

Many medical schools found it necessary to condense the traditional 12-month curriculum into eight or nine months, significantly shortening core clerkships and eliminating clinical elective time. Staff scrambled to fill the free months with various requirements to ensure timely graduation. Such modified educational opportunities included virtual electives, volunteer requirements, and online coursework.

Even when students were finally able to enter the clinical environment, they were unable to participate in many formative experiences. In addition to missing out on certain electives due to constrained schedules, the experiences learners did have were significantly altered. Certain aspects of rotations critical to professional development were no longer available, including outpatient surgical clinic time and same-day elective procedures. In some cases, students were no longer able to pre-round in team rooms due to social distancing requirements, instead being required to look up patient information from home, and calling in to listen to morning report or patient hand-offs. Because learners could not gather in team rooms, they missed the chance to observe residents taking calls from the nurses, calling and communicating with patient families, and using clinical reasoning to reach medical decisions.

These were notable missed learning opportunities. How could learners discern the intricacies of teamwork, observe interactions between senior residents and interns, and/or benefit from post-rounds “chalk talks” without a physical presence? Grand rounds and department conferences became entirely virtual, which limited the opportunities for students to network, seek mentorship, and ask questions.

Learners' involvement in patient care was also limited due to the high volume of COVID-19 patients in hospitals. In the first year of the pandemic, many medical school administrations prohibited learners from caring for COVID-19 patients. At the same time, clinical students sometimes felt pressure to see COVID-19 positive patients. Students had to choose between risking potential exposures while rounding or not having an active role in patient care. Residents, fellows and attending physicians learned to be creative, teaching many skills remotely that are best learned at the bedside.

Learners, like their housestaff and faculty educators, lived in fear of exposure to the virus or needing to quarantine after a potential exposure. For students, this meant missing out on even more time on clinical rotations. Similarly, they were worried about being pulled from clinical rotations as surges in COVID-19 infected patients and strained hospital systems, and stockpiles of personal protective equipment dwindled.

In addition to adjusting to daily changes in the clinical environment, students juggled curricular requirements such as examinations and didactics. Traditional methods of evaluation in clinical education largely remained the same during this time. Some medical schools transitioned clinical grades to pass/fail while other medical schools made no changes to grading. However, students still completed shelf exams and received evaluations based on clinical performance despite having reduced time to study and prepare for exams and less time on rotations. For many medical students, their emerging professional identity is to a great extent dependent on their academic success, and experiencing academic challenges, setbacks, or failures while on clinical rotations posed a major threat to their identity development.

In addition to the disproportionate stress of clinical training in the context of COVID-19, students did not have access to recharging with family and friends. Safety concerns, local lockdowns, and travel bans prevented students from seeing their loved ones. Students were no longer able to gather with classmates outside of the clinical setting. As a result, despite facing shared challenges, medical students often suffered in isolation.

Students encountered significant stress navigating uncertainty and setbacks in their clinical education. At the same time, the changed clinical environment provided remarkable opportunities to accelerate professional identity formation

In a hospital environment that did not allow visitors and had strict social distancing guidelines, students were able to offer support to their patients in a way that other team members could not. They spent time with patients in the afternoons, checking on them, and helping to fill a role traditionally filled by family members. As members of the team with more time than residents or attending physicians, medical students were able to bridge the gap between patients and families, calling loved ones with updates on patients, and offering human interaction to those suffering alone. They provided emotional support as healers, experiences that fostered heightened empathy and emotional maturity while providing meaning and a sense of professional purpose. The ability to connect with an isolated and suffering patient is a skill that was strengthened during the pandemic, and will be carried forward into the future.

Racial reckoning

On May 25, 2020, George Floyd was murdered in Minneapolis, Minnesota, by a police officer. In the weeks that followed, the nation responded with the largest protests in the United States since the civil rights movement of the 1960s.[7] Students, particularly those who are Black, Indigenous, and/or People of Color (BIPOC), were pulled in multiple directions and forced to choose between academic obligations, fighting for justice, and protecting their own mental health. Navigating the dual traumas of racial injustice and the COVID-19 pandemic caused tremendous mental strain. Studying for Step 1 and participating in clerkships in the context of national anti-racism protests was overwhelming and unprecedented. Students worried about how much they could speak out without facing retaliation while grappling with their relative privilege compared to the vulnerability more commonly felt by patients in similar settings. Prioritizing and focusing on medical education proved extremely difficult for students during this time.

The racial reckoning in 2020 introduced significant professional identity tension. Students had to acknowledge their existence within health systems that, at best, had failed to correct persistent and significant racial health disparities.[8] Students had to balance academic obligations with a newly reiterated imperative to be agents of change both immediately and throughout their careers. Students participated in, and at times helped lead, protests.

Academic medical centers reevaluated their role in perpetuating structural racism in medical education and clinical care. Often as a direct result of medical student advocacy, medical school curricula were modified to include mandatory anti-racism content at the beginning of medical education, and race was removed as a biological risk factor in clinical algorithms.[9-11] Questions arose about racial disparities in the student membership of Alpha Omega Alpha Honor Medical Society (ΑΩΑ).[12-14] However, as the ΑΩΑ Councilors and national office leadership had been working on this for several years, the Board in the fall of 2020, adopted significant constitutional changes to promote diversity and inclusivity in the student membership nominations and elections, supporting chapter criteria that holistically recognize the characteristics of excellent physicianship in selecting new members.

Significant work remains to acknowledge and correct the myriad effects of systemic racism and structural inequities on the health of individuals and BIPOC communities. Nonetheless, in the wake of national protest, students asserted themselves by catalyzing institution- and system-wide changes, proving their capacity as agents of transformational change within academic medical institutions.

During this period of radical disruption, learners became leaders and stepped into roles as physician-educators and physician-advocates, creating anti-racist curricula and educating junior and senior colleagues on the wards. Crisis and conflict at academic medical centers afforded learners opportunities to come together as a community and step into leadership roles in which they advocated for conversation and change. While medical students encountered significant tension in their professional identity formation, they navigated dual traumas, and often led their institutions as agents of change.

Challenges drive change

The COVID-19 pandemic altered medical education, introducing a series of critical challenges to students, characterized by disruption, uncertainty, fear, grief, and disappointment. These challenges introduced significant trauma, suffering, and moral injury. Ultimately, these experiences accelerated many students' professional identity formation as they responded and adapted to unprecedented challenges in their medical education. Students were better able to connect to their patients having experienced moral injury themselves during the pandemic. They became emboldened as leaders, advocates, and educators. They were transformed from path-followers to path-formers, and they humanized medical education and clinical care.

The pandemic accelerated professional identity formation among future physicians, catapulting them into their careers having faced significant adversity, uncertainty, and suffering alongside their patients and colleagues. These experiences prepared them to be more compassionate and humane physicians with unprecedented experience navigating uncertainty and loss early in their careers.

References

1. Rilke RM. A Walk. All Poetry. https://allpoetry.com/A-Walk
2. Cruess RL, Cruess SR, Boudreau JD, Snell L, Steinert Y. Reframing medical education to support professional identity formation. Academic Medicine. 2014; 89(11): 1446–51.
3. Daniels N. Just Health: Meeting Health Needs Fairly. Cambridge (UK): Cambridge University Press; 2007.
4. Monrouxe LV, Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. Medical Education. 2011; 45(6): 585–602.
5. Burford B. Group processes in medical education: learning from social identity theory. Medical Education. 2012; 46(2): 143–52.
6. Goldie J. The formation of professional identity in medical students: considerations for educators. Medical Teacher. 2012; 34(9): e641–8.
7. Sheffield JVL, Paauw DS. We Sent Them Home. *The Pharos* of Alpha Omega Alpha. 2020; 83(3): 39–41.
8. Brandt AM. Racism and research: the case of the Tuskegee Syphilis Study. Hastings center report. 1978: 21–9.
9. Nguemeni Tiako MJ, South EC, Ray V. Medical Schools as Racialized Organizations: A Primer. Ann Intern Med. 2021; 174(8): 1143–4.

10. Nieblas-Bedolla E, Christophers B, Nkinsi NT, Schumann PD, Stein E. Changing how race is portrayed in medical education: recommendations from medical students. Academic Medicine. 2020; 95(12): 1802–6.
11. Inker LA, Eneanya ND, Coresh J, et al. New creatinine-and cystatin C–based equations to estimate GFR without race. NEJM. 2021; 385: 1737–49.
12. Boatright D, O'Connor PG, Miller JE. Racial Privilege and Medical Student Awards: Addressing Racial Disparities in Alpha Omega Alpha Honor Society Membership. J Gen Int Med. 2020; 35(11): 3348–51.
13. Boatright D, Ross D, O'Connor P, Moore E, Nunez-Smith M. Racial disparities in medical student membership in the Alpha Omega Alpha honor society. JAMA Intern Med. March 6, 2017. Link: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2607210
14. Wijesekera TP, Kim M, Moore EZ, Sorenson O, Ross DA. All other things being equal: exploring racial and gender disparities in medical school honor society induction. Acad Med. 2019; 94(4): 562–9.

Chapter 7

Post-pandemic academic health centers: Lessons we should take seriously

Harold L. Paz, MD, MS and David J. Skorton, MD

The COVID-19 pandemic has come with difficult but valuable lessons—ones academic medicine must take seriously if we want to succeed in our most important missions. Academic medical centers are evolving to meet the changing needs of society. Specifically, our understanding of medical education is shifting as the inadequacies of health systems in the United States and globally have become more apparent.

At a recent Alpha Omega Alpha Honor Medical Society conference discussing Professionalism in Medicine, we met for a virtual Fireside Chat on those lessons and what they suggest for the future of academic medical centers. What follows is a summary of our discussion, as well as a series of questions and answers.

The basis of the traditional model, outlined in the Flexner Report,[1] is more than a century old. In 1910, it contained some much-needed improvements. At the time, an ungoverned hodgepodge of proprietary, for-profit schools had no common curricular standards, and many had weak admission criteria. The medical profession had no common certification required to practice, resulting in inconsistent patient care. The Flexnerian reforms—including affiliation with universities; higher and more uniform admission standards, a strong basis in biological science, and structured clinical training—improved the practice of medicine dramatically and are the foundation of the standardized four-year model that has remained largely intact ever since. It is worth noting, however, that aspects of the Flexner Report were problematic and had racist and sexist ramifications.[2]

In the past quarter-century, we've seen even more clearly how unequally the health system serves people of different income and education levels, races, ethnicities, and geographies. That tells us that biomedical science knowledge and clinical expertise alone cannot fully equip a physician to provide competent, compassionate care.

A recent study by the National County Health Rankings estimated that 20 percent of our health is attributed to health care;[3] the rest is ascribed to social and environmental determinants of health, personal care including diet and exercise, and genetics. The greatest contributor of these is social and environmental determinants, accounting for an estimated 50 percent of our health.[4] In addition, a survey conducted by Morning Consult revealed that 82 percent of adults in the U.S. believe that being healthy requires more than medical care, and 76 percent agree that certain groups are less healthy because of their social circumstances or economic situations.[5]

There is broad agreement that nonbiological factors, referred to as the social determinants of health (SDOH), must be understood by clinicians and included in health care strategies. Major medical societies, including the Society of General Internal Medicine,[6] the American Academy of Pediatrics,[7] and the American Academy of Family Physicians,[8] have called for direct policy action by medical professionals to address the SDOH. The COVID-19 pandemic has made these inequities—and the need for medical education to address them—even clearer. The educational model must evolve with the needs of academic medicine and health care.

The need for bold leadership and professionalism to address these issues has never been more apparent than during this pandemic. In a time of unprecedented disruption, ambiguity, and fear, our nation has needed clear and informed guidance, delivered in ways that earn the trust of colleagues, patients, families, and communities. Yet news outlets, government, and social media have provided contradictory information, and the public has not known who to trust, causing many to doubt life-saving health guidance and become susceptible to illness. As we have seen, in times of uncertainty, leadership can be a matter of life and death.

We are too late for leadership to save the lives of the more than one million who have died of COVID-19 in the U.S. at the time of this writing—a greater loss than that of the 1918 influenza pandemic. However, COVID-19 is far from the only uncertainty we face as members of the academic medicine community and as a nation; we must also be prepared for new and current challenges that have long gone unsolved. We must learn from today's obstacles and change our approach to leadership for future crises. It will take integrity, courage, will, preparedness, and empathy to address the interconnected health and social challenges facing our world today—whether that is a lack of diversity in medical schools, inadequate funding for medical research, or mistrust between patients and their communities and the health system.

As co-authors and long-time colleagues, we have dedicated much of our careers to promoting and encouraging leadership and professionalism across academic medicine and beyond. Although we have had some successes, we have also fallen short and learned from our experiences. In the Q&A below, we share our thoughts on how to come together across the academic medicine community to improve health for everyone.

What does professionalism mean in the context of the AAMC?

Dr. David Skorton:

For years, the mission of the Association of American Medical Colleges (AAMC) was to serve and lead academic medicine, including medical schools, research centers, academic societies, and teaching hospitals and health systems. In 2020, the AAMC mission was updated: to lead and serve the academic medicine community.

This shift is more than semantics. It represents a belief that professionalism entails being a leader, even and especially when that means challenging the status quo. It is no longer acceptable to *serve* academic medicine as our primary goal; we must prioritize *leading* our sector in advancing every aspect of health care. We hope this leadership-first mentality resonates not only within the AAMC and our constituents, but also with all individuals and organizations seeking systemic change within academic medicine. We are turning our vision for a healthier future into a reality through our action-oriented strategic plan.

In your opinion, what has changed most about health care delivery over the past year, and of those changes, can we expect any to stick around post-pandemic?

Dr. Hal Paz:

There have been several pandemic-related disruptions and demands that offer valuable lessons for the future of academic medical education, research, and patient care.

Accelerated research and discovery

If there is any silver lining to the pandemic, it is the acceleration of critical research and development. The urgent need to develop tests, therapies, and vaccines for COVID-19 brought remarkably rapid progress. The most prominent example of this is the stunning speed and success of vaccine development.[9] Lessons learned here include the critical importance of cooperation and respect among researchers, physicians, staff, and leaders. The Ohio State University Wexner Medical Center (OSUWMC) has been developing this culture for years, so that when COVID-19 created a crisis, the university was able to develop critical solutions in a matter of days.

At OSUWMC, separate teams had been pursuing relevant pandemic studies. When COVID-19 struck, these teams were brought together and were the first in Ohio to transfuse a patient with convalescent plasma. With monoclonal antibodies, OSUWMC eclipsed many other health systems nationwide in volume and successful outcomes. Keys to this success included creating a highly coordinated infrastructure for clinical trials and research as well as an agile, common database. Because OSUWMC had already put these systems in place, they were in a position on Day One of the COVID-19 crisis to try to say “yes” to nearly every clinical research opportunity. That meant first access to new therapeutics as well as new institutional relationships that will continue to be valuable post-COVID-19.

This is a model for the future of medicine, yet to a great extent academic medical centers still train medical professionals in disciplinary silos. If our future physicians are to be prepared to lead and serve over long careers that are likely to unfold amid constant change, academic health centers must evolve to meet these new needs. That means enhancing curriculums with nontraditional areas of inquiry such as racism and health equity, communication and advocacy, and interprofessional collaboration—particularly across the health sciences.

In situations of high risk, collaboration to make research decisions in minutes—decisions that in the pre-COVID-19 world would have involved months of discussions by multiple committees and subcommittees—is absolutely possible. Undoubtably, we must learn from this to continue the rapid pace of discovery moving forward—without sacrificing quality. The public will no longer accept that it often takes more than a decade to move discovery from the laboratory bench to the patient bedside. Collaboration is key to making that a reality.

Greater leveraging of technology

Another legacy of change from the pandemic is an enhanced embrace of the value technology can add in health care. Telehealth enables patients to see health care providers when offices are closed, and eliminates the risk that they will contract COVID-19 from an in-person visit. Just as consumers in other industries have come to demand convenience, 24/7 availability, and a personalized experience, the pandemic demonstrated that these things have value and can be provided to health care consumers too. These new approaches offer the potential of improving individual health and well-being and reducing premature death.

The benefits of telehealth go well beyond convenience and avoiding infection. For health care institutions, telehealth has emerged as a financial lifeline at a time when hospitals were hit with steep drops in surgeries and office visits. In May 2020, Strata Decision Technology's National Patient and Procedure Volume estimated that U.S. hospitals on average were down 55 percent in patient volume, resulting in a total of $60 billion per month in lost revenue.[10] OSUWMC adopted an aggressive strategy to increase telehealth appointments, going from fewer than 50 per month to nearly 2,800 per day. The trend was global; worldwide, more than two-thirds of people seeking health care during the pandemic used telemedicine, with 84 percent doing so for the first time. More than half of those users said they had a satisfactory experience.[11]

The ability of telehealth to overcome barriers to transportation benefits patients, providers, and communities. The American Hospital Association has found that as many as 3.6 million people per year are blocked from obtaining health care because they lack a vehicle, roads are poor, the distance is too great, and other barriers.[12] At OSUWMC, the practical savings from the increased use of telemedicine were tremendous. Missed appointments dropped by three percent and patients were saved the trouble of traveling a total of 12.2 million miles—the equivalent of saving more than a half-million gallons of gas. Much of the drop in missed appointments occurred among patients served by Medicaid, a population especially vulnerable to transportation barriers.

The value of data analytics to health care has been clear for some time, but amid the crisis of the pandemic it has become more important than ever. OSUWMC's mass vaccination site at the Schottenstein Center, its large indoor athletic facility, put the value of data analytics on display. Patient flow was constantly adjusted to match vaccine inventory despite significant unpredictability in the supply chain. It also aligned patient volume with staff availability, so no one had to wait too long, and made it easy to keep track of first and second-dose appointments. As a result, nearly 250,000 patients were vaccinated in a matter of months.

Skilled use of data helps identify opportunities, make health care decisions, and cut costs all at once. A greater ability to anticipate coming developments has helped the response to fast-changing needs. Making greater use of external data—using regional and state trends in hospital patient volume to predict the impact on local hospitals—has helped improve the care available to all patients. These techniques have helped forecast and drive decisions related to ICU bed capacity, ventilator availability, employee health and staffing, and COVID-19 exposure risk to the most vulnerable patients.

How can academic medicine address health inequities?

Dr. David Skorton:

To move toward health equity, we must collaborate with communities, establish trust, collect socioeconomic data, and meaningfully improve diversity in academic medicine. Each of these topics is complex and requires further examination.

Community collaboration

To best serve our communities, we must step out beyond the walls of our academic institutions. We must expand the traditional tripartite mission of academic medicine—medical education, clinical care, and research—which is why the AAMC recently added a fourth mission, community collaboration, to better address the social and environmental determinants of health.[13]

The need for this addition has been especially evident during the COVID-19 pandemic. It was not enough to provide care to patients once they had contracted the deadly virus. We also needed to work with patients, families, and communities to implement life-saving preventive health practices on a larger scale—including mask-wearing, social distancing, and proper sanitation—and to work with community leaders to understand the barriers to achieving these practices. When vaccines became available, we needed to gain the trust of communities regarding the vaccines' safety and efficacy and address concerns. All these needs fell outside of the traditional role of simply delivering health care and required collaboration across the public and private sectors. We can only be successful when the academic medicine community partners with experts across the humanities, economics, technology, and communications.

This means establishing and expanding ongoing, two-way community dialogues. It means listening to, and learning from, the lived experiences of community members and experts across sectors to understand how social and environmental factors may be impacting health and well-being. It means working collaboratively to create inclusive solutions in housing, food access, education, and social support.

Earning trust

We must lead by listening, and the longer I work in academic medicine, the more I am humbled by an awareness of what I do not know. It is important to recognize the gaps in perspectives and learn from and respect the lived experiences of those in our communities.

True collaboration is not possible without trust. The COVID-19 pandemic revealed the mistrust marginalized communities often have toward the medical community, for clear and tragic reasons. Mistrust is a rational response to injustice, and it is important that the academic medicine community not dismiss it, but rather acknowledge that this skepticism has been earned by decades of systemic racism and unequal access to care.

While feelings of mistrust are valid, they must be addressed in order to combine the wisdom of academic medicine with the wisdom of communities. A partnership based on mutual trust and collaboration has the potential not only to save lives, but to also reshape the way we think about community health. It is the responsibility of members of the academic medicine community to understand the origins of mistrust and correct it. A transparent and intersectional approach is effective in building trust, as demonstrated in the AAMC's Principles of Trustworthiness,[14] an effort designed to connect health institutions with local communities. Our hope is that these organizations can integrate local perspectives and earn the trust of the people they serve.

Socioeconomic data collection

We must better understand the true socioeconomic situations of our patients and communities if we are to address the societal issues that impact their health. Yet, the U.S. has largely failed to collect socioeconomic and demographic data on a large scale to determine the impact of health issues on various populations. These need to be a national, standardized collection of socioeconomic and demographic data, supported by public and private resources, incentives, and community engagement. This should include anonymous, disaggregated data on race and ethnicity, social risk for individuals, and social and environmental determinants of health.

This patient-centered data will help the academic medicine community identify disparities in health care and make informed recommendations not only for health care providers, but for communities. Engaging diverse communities across the U.S. to understand how to communicate this data back to communities and ensure it is used to personalize treatments, improve communication between doctors and patients, and enhance health outcomes is compulsory.

Diversification of the medical workforce

We have, sadly, failed to make sufficient progress in the racial and ethnic diversity of the academic medicine community over the past decades. Today, the number of Black males enrolled in medical school in the U.S. has not significantly improved from what it was in 1978.[15] Only about three percent of doctors are Black males,[16] and the percentage of American Indian and Alaska Native medical school students is even smaller.[17]

This is unacceptable. A lack of diversity not only robs would-be doctors and scientists of fulfilling careers, but it also deprives the academic medicine community of the contributions and perspectives of people across racial and ethnic backgrounds. It creates mistrust in communities, whose members may not see their own identities reflected in the health care they receive. And a lack of mentors and role models in academic medicine discourages the next generation of students from seeing a place for themselves. A diverse physician workforce that reflects the collective diversity of patients and the world is imperative.

To make progress, assertive efforts to cultivate a more diverse physician workforce across all racial and ethnic backgrounds is needed. The AAMC's strategic plan outlines a multi-tiered, multi-year approach to diversifying the physician workforce. This includes investing in all levels of education, encouraging students to consider a career in medicine from a young age, and developing baseline data of diverse applicants and matriculants. Systemic change requires systemic action.

How has COVID-19 impacted medical education?

Dr. Hal Paz:

OSUWMC has more than 9,000 students across seven health science colleges, and is committed to embedding innovation and interprofessionalism in its curriculum. To practice competently in the modern world, health professionals need to be able to deliver personalized, team-based care. That means graduating interdisciplinary teams, speaking a common language, and following the same evidence-based pathway in care delivery. COVID-19 has transformed the understanding of the context and content to provide good interprofessional training.

An interdisciplinary Health Science Center, which completed its first phase of construction in January 2022, is a major step forward in OSUWMC's commitment to team health care. In 2020, an Associate Vice Chancellor for Interprofessional Practice and Education was recruited to lead this effort. A number of initiatives have been launched, from clinical simulation experiences, to bringing together more than one thousand students from across the health sciences in service-learning activities ranging from substance use disorders to structural racism.

Responding to COVID-19 has helped us understand some of the research that has been gathered around team performance—where and when it is most effective. We now can integrate what we've learned into all health sciences curricula. Telehealth was barely on our radar before, but now we know it requires a unique skill set that health sciences students must have when they graduate: not just the skills to provide telehealth visits, but to also facilitate team care that involves patients and family members in planning.

A greater appreciation of interprofessionalism leads naturally to broadening the scope of practice. Being open to all avenues to improve health and well-being is a must. As recently as two years ago, pharmacists in some states saw significant pushback against allowing them to give vaccinations. COVID-19 has made clear how critical that capability can be.

Health equity education

The disparate impact that COVID-19 has had on minority and underserved populations made clear that creating an anti-racist learning environment is more important than ever. That means fostering diversity, equity, and inclusion and enhancing curriculum with racism mitigation.

To increase diversity in the health sciences, an authentically inclusive admission process can make a difference. Ohio State has been able to increase diversity in incoming College of Medicine classes, not because admissions committees have accepted more women and minorities, but because more women and minorities who receive acceptance letters are choosing to study there. Many of those minority students report that they chose Ohio State because they felt more welcome during the admissions process. Of our last incoming class, 24 percent of students belong to groups that are underrepresented in medicine. Ohio State has the nation's fourth highest percentage of African American students. A new College of Medicine mentoring program for 2020-21 matches students who are Black and/or Latinx with faculty members from similar backgrounds.

Education deans and students at OSUWMC have worked together to develop a plan to combat racism, in alignment with the OSUWMC overall Anti-Racism Action Plan, which looks at three areas: admissions and representation; curriculum faculty development, evaluation, and assessment; and student support. It includes support plans for pre-matriculation and robust equity and diversity training during orientation. It also calls for review of curriculum to remove racism and bias as well as training for faculty on how to identify bias in student assessments.

Because truly inclusive learning can't take place entirely inside the hospital and classroom walls, OSUWMC students also work and learn together in the communities we serve. More than 1,300 learners joined with faculty and staff across the seven health sciences colleges to create, implement, and assess an interdisciplinary program on personal and collective responsibility for health equity. Experiences like these will better prepare students to serve patients from diverse backgrounds. Being culturally competent helps them provide compassionate care for all, regardless of a patient's background or circumstance.

Conclusion

The greatest challenge facing academic medicine today is severe health inequities across communities. The COVID-19 pandemic has highlighted enduring inequities, and has taken a disproportionate toll on under-resourced communities in the U.S. and around the world. Historically, academic medicine has failed to adequately address the societal and environmental issues that contribute to health inequities, including poverty and structural racism. Medicine must acknowledge, understand, and address these issues to lead academic medicine and health care in creating a healthier world.

References

1. Flexner A. Medical education in the United States and Canada: A report to the Carnegie Foundation for the advancement of teaching. The Merrymount Press. 1910; Bulletin No.4.
2. Redford G. AAMC renames prestigious Abraham Flexner award in light of racist and sexist writings. AAMC. November 2020. https://www.aamc.org/news-insights/aamc-renames-prestigious-abraham-flexner-award-light-racist-and-sexist-writings.
3. County health rankings model. University of Wisconsin Population Health Institute. 2021. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model.
4. 2021 Measures. University of Wisconsin Population Health Institute. 2021. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/2021-measures.
5. Association of American Medical Colleges: Community Health Survey. Morning Consult. September 2021.
6. Byhoff E, Kangovi S, Berkowitz S.A. et al. A society of general internal medicine position statement on the internists' role in social determinants of health. J Gen Intern Med. 35: 2020; 2721–27.
7. Garg A, Homer C, Dworkin P. Addressing social determinants of health: Challenges and opportunities in a value-based model. Pediatrics. April 2019; 143 (4); e20182355.
8. Krist AH, Davidson KW, Ngo-Metzger Q. What evidence do we need before recommending routine screening for social determinants of health? Am Fam Physician. May 2019; 99(10): 602-5.
9. Ball P. The lightning-fast quest for COVID vaccines—and what it means for other diseases. Nature. December 2020.
10. National patient and procedure volume tracker. Strata Decision Technologies. May 2020. https://www.stratadecision.com/wp-content/uploads/2020/05/National-Patient-and-Procedure-Volume-Tracker-and-Report_May2020.pdf.
11. Telemedicine: here to stay? Dynata. 2020. https://www.dynata.com/telemedicine-here-to-stay/.
12. Social determinants of health series: Transportation and the role of hospitals. American Hospital Association. November 2017. https://www.aha.org/ahahret-guides/2017-11-15-social-determinants-health-series-transportation-and-role-hospitals.
13. Alberti P, Fair M, Skorton DJ. Now is our time to act: Why academic medicine must embrace community collaboration as its fourth mission. Academic Medicine. August 2021. https://journals.lww.com/academicmedicine/abstract/9000/now_is_our_time_to_act__why_academic_medicine_must.96573.aspx

14. The principles of trustworthiness. AAMC Center for Health Justice. 2021. https://www.aamchealthjustice.org/resources/trustworthiness-toolkit.
15. Black men make up less than 3% of physicians. That requires immediate action, say leaders in academic medicine. AAMC. 2020. https://www.aamc.org/news-insights/black-men-make-less-3-physicians-requires-immediate-action-say-leaders-academic-medicine.
16. Altering the course: Black males in medicine. AAMC. 2015. https://store.aamc.org/altering-the-course-black-males-in-medicine.html.
17. Gray A. Where are all the Native doctors? Association of American Indian Physicians. 2016. https://www.aaip.org/media/news/m.blog/76/where-are-all-the-native-doctors.

Chapter 8

The future of health professions education

George E. Thibault, MD

Over the past several years I have been enormously impressed with the changes that have occurred in medical education, and more broadly health professions education. I only hope that going forward we take advantage of all that we have learned, and do not revert back to what we did before. I hope that we continue to develop an educational system that is worthy of the wonderful students we have, and also one that fits with the future of the academic health center to better serve the needs of our patients.

I was asked in February 2020 to write a personal perspective about the future of health professions education. In February 2020, which seems like an eon ago, COVID had not yet been declared a pandemic. My perspectives are based on my experience at the Josiah Macy Jr. Foundation, my experience as a Harvard Medical School faculty member, and experiences as Chair of the Board of the MGH Institute of Health Professions.

The first three months of COVID, during lockdown, I was able to reflect and develop a list of six trends that we all should focus on as we come out of this pandemic.

Implementing interprofessional education

Leadership from the top is essential to overcoming the logistical obstacles and ensuring resources are available. The health professions training must be rigorous and involve learners in meaningful work. It must be professional development.

In addition, faculty must be developed to assess knowledge and progress, on an interprofessional basis and without bias.

Technology can help overcome some barriers that currently exist. Interprofessional education (IPE) standards are now included in the accreditation of most, if not all, health professions education, but there is still great asymmetry across the country and across the professions. We must truly integrate IPE into the core clinical training of health professionals. Traditionally, IPE experience has been preclinical or part of electives. It must become central and core.

There exists a huge body of evidence that care delivered by a well-functioning team is superbly better care on many dimensions. The traditional form of education and clinical training does not prepare future health care providers for what is core to what will be their primary activities. In a learning collaborative practice there exists meaningful respect for the other professions. This should be as core to clinical training as is pathophysiology.

We also need to broaden the definition of IPE to include other professions such as law, architecture, business, economics, and the social sciences.

Longitudinal integrated clinical education

Longitudinal integrated clinical education is more patient, community, and chronic disease oriented. Hospital-based rotational clinical training has been the norm since the Flexner report. But the deficiencies of this approach are becoming more apparent, especially with regard to the inefficiencies of learning in non-ideal learning environments, and the absence of continuity.

The principles driving longitudinal integrated clinical education are focused on continuity—continuity of care, continuity of curriculum, continuity of supervision, and continuity of location. Continuity enables learners to experience patients and provide care over time consistently and appropriately. It also allows for more meaningful feedback and evaluation. Continuity supports the needs of the training site in that having learners care for patients in the same location leads to the trust that allows them to be incorporated into the activities of the site.

These longitudinal experiences also provide for robust interprofessional experiences.

Social determinants of health

Education in the social determinants of health and in the social and humanistic missions of the health profession are paramount for all health care providers. It has been shown that 80 percent of the health of the public is derived from factors other than direct medical care. If we believe that the purpose of health professions education is to improve the health of the public, then the social determinants of health must be part of the curriculum for health care education. The social determinants of health are the major contributors to health inequities.

We must also emphasize the humanistic heritage of the health professions. This means making the person's values, interests, and dignity central to all of our efforts. This is elemental as is the importance of diversity, equity, inclusion, and anti-racism throughout the health profession. We must teach and model these principles.

Continuum of the health professions

A continuum of the health professions is necessary to promote lifelong learning and long-term well-being of health professionals. We have created artificial barriers across the various phases of health professions education that lead to inefficiencies and an absence of consistency. We need a common language in measurements across the spectrum to emphasize learner-driven education from the beginning, and to emphasize the importance of optimal learning environments throughout the educational system.

Competency-based time-variable education

Competency-based time variables better fulfills our social contract, and produces the most competent practitioners in the most efficient way. We need to move away from "time in place" as a proxy for competency and regard time as a resource to better serve individual learner needs through more individualized education. This, of course, requires a comprehensive curricular and structural assessment strategy. Learners and teachers must become partners in producing the finished product which will then lead to the habits of lifelong learning.

Artificial intelligence

The integration of artificial intelligence (AI) and new educational information technologies into this continuum of health professions education of practice is imperative. Technology, such as online learning simulation computer models, will play a larger and larger role; not replacing but supplementing in-person learning and direct patient experiences.

Health professions learners need to be taught the strengths and limitations of existing and new technologies and algorithms. We've already begun to learn a lot about how some algorithms can have an adverse effect on health equity. Health professionals must learn to harness AI as a tool to improve medical decision-making.

There have been myriad discussions over many, many years about when AI was actually going to replace the health professional. Happily, I think we are heading to a new phase of seeing AI not as a replacement of clinicians, but as a supplement that the clinician needs to learn how to harness.

Furthermore, we need to learn how we will use technology to free up time for health professionals to perform higher functions such as reasoning, communications, compassion, and empathy that cannot be done by technology.

Interconnectivity

These trends are not separate; they are interconnected and reinforce one another. IPE is essential to teach the social determinants of health and to engage in lifelong learning. Longitudinal clinical training provides for a greater understanding of the social determinants of health and requires a type of faculty supervision that is necessary for competency-based education.

The recent experiences with the COVID-19 pandemic demonstrate that every one of these trends is now more relevant, more important, and in many ways more urgent. It is very clear that team-based collaborative care was critical in managing and caring for patients, and ourselves, throughout COVID. We have also come to realize the vulnerabilities in our hospital-based rotational system of clinical training, which was totally disrupted by the pandemic. We need new models that will not be disrupted the next time we have an emergency.

The importance of the social determinants of health in determining the susceptibility and outcomes of COVID has been made evident on a daily basis. The importance of lifelong learning has been emphasized by the need for flexibility in acquiring new skills and integrating new information. The incredible stress that our clinicians have been under in order to be able to sustain a consistent and continuous response emphasizes the importance of clinician well-being.

The importance of time variable education has been accentuated by the fact that we no longer can count on using time and number of cases to determine competency. We must have better metrics in order to have more a more robust and sustainable workforce and educational system going forward.

The importance of technology to supplement education and health care has been emphasized by the COVID-19 pandemic. We need to figure out how to integrate it at all levels in different settings to find the right hybrid for the combination of in-person and technology-based education and care.

All of this will require great cultural change in our educational institutions and in academic health centers. To achieve what we need to accomplish and embrace these changes, we must break down the silos across the professions, within academia, in the community, and with all the patients we serve. We also need to think differently about how we approach evaluation and accreditation. This means some major changes in how our organizational structures that oversee these complex processes do their work.

I'm optimistic that we are on the way. In my 10 years at the Macy Foundation, I witnessed encouraging experimentation in the education of the health professionals. COVID has accelerated the need for change, and we must seize this moment. We cannot go backwards. However, to go forward we must learn from these experiences and take the health professions education system to a new level that is worthy of the great students we have.

Remember, the ultimate goal of health professions education is to improve the health of everyone.

Chapter 9

Leading in times of crisis: From the pandemic to Black Lives Matter

Céline R. Gounder, MD, ScM, FIDSA; and Kaufi Dzirasa, MD, PhD

In light of the COVID-19 pandemic, the murder of George Floyd, and all the turmoil in the world today, professionalism and racial recognition remind us of the intersection of our personal and professional lives.

Tuberculosis (TB) is one of the oldest communicable diseases known to humankind, and it continues today. HIV emerged more recently but continues to be an issue worldwide. If you consider the number of deaths globally from TB and HIV it's about 3 million.[1] That's half the number of global deaths from COVID-19, now more than 6.3 million.[2] This is but one example of entrenched disparities as to whose lives are valued and why and where those lives are valued.

The willingness of some health care institutions to pitch in and do their part to control outbreaks has sometimes been disappointing. During the Ebola epidemic in West Africa, numerous institutions in New York City told their trainees and staff, "We do not want you volunteering." And then when some Ebola aid workers, like Kaci Hickox, returned to the U.S. after their tour of duty, they were treated punitively, rather than being recognized for their important service.

In early 2020, many health care providers felt abandoned by their institutions and the government, left to protect themselves with garbage bags and homemade cloth masks. When former Governor Andrew Cuomo called on health systems in New York state to form one big health system, transferring between hospitals as necessary to balance the patient load, we struggled to transfer patients to hospitals within a few blocks of one another in New York City. As we near the end of the third year of the COVID pandemic, the health care workforce is burnt out and demoralized. Many health care workers are leaving jobs in the hospital to work in less stressful out-patient settings or are leaving clinical work all together. The pandemic has made health professionals around the world stop and reconsider whether having the skills, desire, and experience is enough to mentally, physically, psychologically, and professionally weather a global pandemic.

Following is a dialogue on the professionalism and leadership needed to guide health care professionals and the public through the trials and tribulations of a global pandemic.

In the past, physicians learned lots of information and told patients what to do to be safe and well. In today's world, how do physicians professionally balance how much information and which details should be shared to keep the public safe, and how does that shape how people have been navigating this pandemic?

Dr. Gounder:

This is an interesting question because it gets to the notion of paternalism. You have to start with scientific accuracy, regardless of how much or how little detail is being released. You must be scientifically accurate.

In March, April, and May of 2020, we knew that this was a respiratory infection, and we knew that masks were effective in curtailing spread. Now, the details have evolved and we came to understand that SARS-CoV-2 is transmitted largely by aerosol or airborne transmission as opposed to short-range droplet transmission, versus droplet transmission and this has implications for mask-wearing, particularly the types of masks we wear. We knew from the beginning that masks were effective, but the messaging was coming from a place of scarcity of reliable information and being afraid that there would be a run on personal protective equipment, in particular masks that would leave health care workers unprotected. When you conflate the two concerns about scarcity and whether masks work, the result is a message that is no longer scientifically accurate. This is where we as health care professionals need to start. The message should have been to stay home, socially distance from any people, and give health care workers on the front lines and other essential workers priority access to the personal protective equipment necessary to keep them safe.

These conversations need to start with accuracy and honesty.

For more than two years the pandemic has ravaged our lives, radically changing how we do things in some very basic ways—we haven't been able to socialize and see family members and friends; some of us have not been able to go to the office or to the classroom; and others have been forced to continue going out but sometimes at great danger to themselves.

However, for many people in this country this is not their first experience of living under siege. Could you tell us a little bit about how the state of our environments and society has influenced you over the past couple of years?

Dr. Dzirasa:

In the early part of the pandemic and I found myself working an unusual number of hours because most of my research laboratory had shut down and I had taken a lot of the work on myself. In college, I was a Division I athlete, and in medical school and residency I found that one of the ways I could manage my stress was by running. I regularly run a couple of hours. When I run I feel better, I require less sleep, and I'm way more productive. While most of us were disconnected from our friends and parents in ways that we hadn't ever been in our lives, I took to running long distances to cope with the stress and social isolation.

I am a Black man from North Carolina. I had family members in Maryland who had died from COVID. Like never before, I was concerned that going to see my mom was deadly in ways that I've never really explored in my life. Our entire nation, soon-to-be entire world, was wrestling with the idea that being around other people could kill us.

Then suddenly in the summer of 2020, we were faced with the murder of George Floyd, and in addition to the upheaval caused by the pandemic, I felt that as a Black man I was constantly under scrutiny. Things changed from the normal cues that I had regularly experienced like a police officer driving by and sizing me up, to someone who saw me working in the research building and felt uncertain about whether I belonged there despite the fact that I did graduate school, and post-Doctoral and residency research, and have been faculty in the building for more than 20 years. People now felt uncomfortable by my presence.

Every time I turned on the TV, people were being killed because other folks felt like they didn't belong in a certain place. Ahmaud Arbery was simply running through a neighborhood. He was a better athlete than I am, but otherwise we don't look much different. Because he was running, training, someone felt he didn't belong. They followed him in a car and killed him. When the video was released on TV, my stress relief felt more dangerous than it had ever felt in my entire life. I was afraid to take my daily stress relief run.

The juxtaposition of trying to manage this global pandemic with the new-found danger in my stress reliever made me realize the profoundness of this current situation. I joined the multitude of others around the world in carrying this weight. We as a nation, as a profession, have been wrestling with this central question of what it means to create a physician workforce that better reflects the population we serve. One of the areas in which we've done poorly in is Black men. Despite the best efforts of our nation, we have not increased the number of Black men in medical schools beyond around 500 in the last 30 years.[4] As we talk about professionalism, it is extremely important to note that there are people who experience the duality of these weights—the weight of being a Black man paired with the weight of the pandemic.

The murder of George Floyd was sadly not the first, and surely won't be the last, example of police brutality or Black lives being devalued in this country. I believe that much like the assassinations of President John F. Kennedy and Martin Luther King, Jr., we will all remember where we were when we learned about this horrific murder, and how it made us feel.

Dr. Dzirasa:

The tragic murder of George Floyd arrested our nation and brought about this massive reckoning in medicine and academia largely because we were already arrested. We were already at home, and as a psychiatrist, I realize that emotions are powerful forces and shared empathy is a powerful thing. But, we were already stopped, and emotionally aware, and emotionally present when it happened.

You have said, "the fierce urgency of now" drives you to action on these issues. That is a very evocative phrase. On a national scale, what do you see as the factors building the sense of urgency, and how are you taking action on this as a medical professional?

Dr. Dzirasa:

As a nation we need to do a better job of mining our talent. If I walk into any organization and at least half the people there are not women, I cannot be convinced that the organization has the best talent at its forefront. So, as our nation begins to transform and become more diverse, when we walk into arenas and those arenas do not match the population we draw from, I'm less and less convinced that we're generating the best product. I want to make sure that our country is drawing on the best talent to solve its biggest challenges and I cannot be convinced that we have our best thinkers in the room if the population of individuals working on those challenges looks homogeneous.

As a physician scientist in the research workforce, I see the poor job we are doing in mining talent. There is a lot of talk about how the United States can continue to compete in the global arena. It is going to be really important to make sure that we're investing in nurturing the next generation so that the best talent is always on the field to generate the best work product.

It is also critically important to have role models that young folks can see and look up to. There is also urgency in finding these mentors in order to bring new talent to our profession. Young medical professionals need to look to their role models and mentors and understand that there is space for them in medicine.

Among the myriad people providing health information and guidance and helping us to interpret the pandemic, there appears to be very few women. Please reflect on being one of the few women in these roles speaking to our nation.

Dr. Gounder:

There was a study in JAMA Internal Medicine published late in 2020 looking at the gender and racial ethnicity breakdown of the health care experts who are appearing on television during prime time news hours. It found that there were a total of three women with an infectious disease background.[5] Many of the people who do appear on television are not actually experts in the field about which they are speaking, which is a problem.

This also relates to the disparate impact of the pandemic on women. To go on television as an infectious disease expert, at least in the beginning of the pandemic, a lot of the work was uncompensated. But that initial unpaid work is how you establish a track record, that may then lead to being brought on as a paid contributor or analyst. This is how all three of the female infectious disease experts became network analysts. We were required to do numerous appearances for free in order to develop relationships and a track record first.

In the last year we have seen a multitude of experts on all things public health, not necessarily infectious diseases or public health. This poses a great many challenges in terms of interpreting health information, and ultimately how our country has fared in the pandemic. How can we as physicians—not just infectious disease specialists and public health experts—help our country navigate the deluge of information and misinformation?

Dr. Gounder:

This really speaks to what it is to be a medical professional. There have been myriad opinions including some saying that natural infection provides better immunity than vaccination. That's not correct. Individuals get more durable and robust immunity while incurring minimal risk from vaccination. We haven't seen millions of people end up in the hospital or dead from vaccinations. Some of the individuals espousing this theory are cardiologists and neuroradiologists who do not have the training and expertise to interpret the immunology and epidemiology on COVID vaccination. Some may ask, "Isn't multidisciplinary advice better?" I'm a very huge fan of multidisciplinary, but that means you're an expert in multiple fields and you draw from that expertise across those multiple fields. This example is a-disciplinary, in other words no expertise in a relevant discipline, rather coming from an outside discipline.

We've seen this happen in the tech field where a lot of people who have had success in tech industries thinking they can solve all the problems of the health industry until they understand that the regulatory environment and associated liabilities are there for many reasons. Health care is a very different industry from the tech industry or the financial industry. A-disciplinary means that just because you have tremendous success in another space and you're an expert in that space does not make you an expert in everything. What makes an expert is spending the time studying and gaining experience in a specific field.

Unfortunately, many of the people who have been speaking to the issues of the pandemic do not have the expertise, which creates muddied communication. This has made the questions and answers around masking, whether it is safe to go back to school, and the effectiveness of the vaccines confusing and politicized.

What is our role as medical professionals to navigate this miscommunication?

Dr. Gounder:

If I started practicing in ways that are outside of my scope, there is a medical licensing board that evaluates my actions. There is a system set up to make sure that I'm not operating outside of my professional boundaries and in a way that is harmful. If there are physicians providing health information in ways that are probably measurably harmful at the population level, perhaps they are operating outside the scope and the domain of their expertise.

One of the most important and potent tools is communication. If an individual is not an expert in a particular subject, if they are not experienced in that space, it is unprofessional for them to be speaking outside of their scope of expertise, just as it would be unprofessional and dangerous for them to try to perform a procedure they are not trained to undertake.

State boards should take this into account with their members, addressing this unprofessional behavior. Media organizations do not have the expertise to be able to differentiate, so they make decisions based on outreach and availability. We need to have a way to ensure professionalism whether the situation occurs in a clinic, in a hospital, at a patient's bedside, or in the media.

When thinking about racism, and anti-racism, it's not about what you intend or what you feel, the only thing that matters is outcome, so if a policy or an action, or a workplace culture reduces racial inequality it's anti-racist but if it increases racial inequality it is racist regardless of the intent. Thinking about that framing of racial inequality and the workplace in the STEM careers, how should society frame what we should be doing around Diversity, Equity, and Inclusion initiatives?

Dr. Dzirasa:

These feelings are important and critical in terms of shaping human behavior across groups of individuals. Feelings are incredibly important for organizing societies and groups. The brain gets used to things and notices change. Change drives feelings. Where things actually are on a measurable scale that is real, and factual, and truthful, but the brain objectively determines change. Feelings are indeed concrete processes, but if you're detecting change it means a change is a function of a set point, which is a function of the past. So, if we're going to talk about racism, first we have to talk about the past, which sets the current set point that we emotionally respond to. This means we have to begin any talk about anti-racism with what racism is, how it was established, and how it led to the current state. Then we have to say if, in any way shape or form, we have benefited from systems that were created by the racist state; anti-racism efforts may make us feel negative because they are changing the current set points in a way that produces a negative emotional response. Just because it produces some negative feelings does not mean it is not doing something that is important for a greater good and ultimately creating a better ecosystem for all.

What this means, though, is that as you're making change some might notice a sub-point moving in this way and some might notice the subpoint moving the opposite way, meaning people can have very different emotional experiences as anti-racism efforts are moving forward. Some might say that the feelings don't matter and we should just put the practices in place to yield an anti-racism outcome. I as a psychiatrist, don't believe that. I do believe you have to navigate people's individual emotional responses. We're a social species as an organism and how we organize with one another is coarsely communicated through emotions. It is important to understand that you will feel negative, that there are things you will worry about with these changes, but we have to put systems in place to help navigate those feelings as we are committed to making these changes. The fact that some people will feel negative should not prevent us from making change. What's critically important here is that because of the set point, even those who might say anti-racism efforts are racist against those who have benefited from racism, it is important to say up front, that racism is a bad thing, and anti-racism efforts correct a bad thing. We have to deal with race if we're going to talk about anti-racism because racism is a fundamental part of how we ended up in this place.

There is a lot of talk about physician burnout and how one of the things we need to build into our profession is the ability to help ourselves, and sustain ourselves as individuals in the field because we as a profession are burning out. Many medical schools have built well-being into their professionalism curriculum. How are you thinking about physician well-being for yourself and your colleagues?

Dr. Gounder:

I went 18 months with only four days off, working 100 hours a week, and only just recently took some time off. I know I am burned out from that experience. Some of that burnout is from working really hard, and some is emotional burnout from witnessing politicization of the pandemic. How do you balance hard work that provides a sense of purpose with very real exhaustion?

When people don't have a sense of purpose, when they feel like they're doing things that are perhaps overly administrative, not patient-facing enough, they're at greater risk for burnout. It is concerning that the conversation about burnout is often about self-care and individual resilience, while there is something to be said for self-care, burnout is very much a reflection of systems and structures.

References

1. World Health Organization. Fact sheet: Tuberculosis, October 14, 2021. https://www.who.int/news-room/fact-sheets/detail/tuberculosis.

2. Max Roser and Hannah Ritchie (2018) - "HIV / AIDS". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/hiv-aids' [Online Resource].

3. Gounder C. Recent mandatory quarantine policies are unscientific–and dangerous. https://jp.reuters.com/article/idIN357652602420141028.

4. Devin B, Morris BA, Gruppuso PA, McGee HA, et al. Diversity of the National Medical Student Body — Four Decades of Inequities. N Engl J Med. 2021; 384: 1661-8. https://www.nejm.org/doi/full/10.1056/NEJMsr2028487.

5. Tezel A, Griffith KA, Jones RD, Jagsi R. Diversity and Representation of Physicians During the COVID-19 News Cycle. JAMA Intern Med. 2021; 181(1): 124–7. https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2774122.

Chapter 10

Conclusion

Dawn E. DeWitt, MD, MSc, CMedEd, MACP, FRACP, FRCP-London

The COVID pandemic tested each of us, and all of us, in the medical profession. It tested our understanding of science, science that rapidly changed as the medical and scientific world mobilized to understand COVID-19 transmission, disease processes, epidemiology, risk for severe disease, and treatment.

Leadership, communication and trust

Through all the challenges with prevention, patients, the public, and the politics, we also learned that the call for professionalism remains intact. As Dr. Richard L. Byyny points out in Chapter 1, physicians and health professionals rose to the call to care for others, even at the risk to their own lives. However, the pandemic laid bare the inexcusable inequities in our health care system, and the resulting morbidity and mortality related to those inequities. As professionals, "agency" and "making a difference" is important to our own wellness, resilience, and strength in the face of difficulties, as much as it is an important contribution to improving patient care. Dr. Byyny's call for transformation is critical, and we must heed that call by pushing every person, every health system, and every politician to actions that are based on science.

The pandemic highlighted the importance of trust, transparency, and communication as important elements that facilitate leadership and professionalism, especially during times of crisis. The chapter by Dr. Mark Whipple and Kellie Engel elegantly outlines how one medical school dealt with uncertainty through systematic, transparent, inclusive communication and decision-making. As physicians, we know that trust is a core construct underlying the physician-patient alliance. Yet leaders in health care do not always focus on ways to build, and maintain, trust within organizations—and we should consistently examine our leadership and professionalism through the lens of trust. When we ask ourselves, what else could we have done to increase mask-wearing and vaccination uptake during the pandemic, I would point us to how we can increase trust in us as professionals and as a profession, one conversation and one message at a time.

Drs. Céline Gounder and Kaufi Dzirasi (Chapter 3) review some key pandemic communication lessons and how flawed messaging hindered our efforts—the importance of deliberate honesty and careful translation of science cannot be over-stated. The leadership challenges for our profession are myriad. Controlling or promoting the "best" message is critical. Rather than on-off mask mandates, perhaps we should be framing the issue in the same way we frame other risks about smoking, alcohol, cancer, and medical treatments. For example, seat belts aren't 100 percent protective, but we don't highlight the deaths in people wearing seat belts—similarly, if masking is greater than 50 percent effective at preventing infection and vaccinations are more than 90 percent effective at preventing hospitalization and death, why aren't we working with the media to consistently message the success of masking and vaccinations? Emerging evidence suggests that recurrent COVID infections may have long-term health consequences.[1] If limiting re-infections becomes an important goal, what is our duty to communicate this honestly to the public, i.e., sadly a return to "the before times" normal for large social gatherings may only occur with better (if unpopular) messaging and recommendations for ongoing adjustments (vaccination requirements and masking in high risk situations).

In an uplifting viewpoint, Dr. Jeffrey Wallace (Chapter 4) gives a heartwarming account of the efforts of many health care professionals to protect and respect our elders during the pandemic. In addition to the heroic teamwork highlighted by his story, we should be repeatedly pointing to the incredible life-saving efforts of most physicians, residents, students, and colleagues. We see here the value and effectiveness of leadership, professionalism, and teamwork. Additionally, Dr. Wallace's comments, and those of Drs. Paz and Skorton (Chapter 8) reinforce that we should be consistently messaging that the rapid development of highly effective vaccines, i.e., the near-miraculous, rapid development of highly effective vaccines, has provided incredible protection against serious illness, hospitalization, and death. We will need that message for the ongoing challenges ahead.

Recruiting and including the "best and brightest"

The chapter by Drs. Douglas Paauw and Sheryl Pfeil, co-authored by medical students Emily Geyer and Elizabeth Stein (both have since received medical degrees), highlights critical issues faced by students. As some medical schools proactively released their graduates into the workforce, and the United Kingdom allowed students to work in health care roles,[2,3] students were excluded from clinical training, but they volunteered and thereby suffered as they watched and tried to avoid helplessly observing from the sidelines. They coped with isolation and multiple uncertainties about their futures as medical schools went online, national board examinations were postponed or cancelled, and residency interviews and the match went online. However, despite the clear evidence of physician and health care professional sacrifice, applications to medical schools rose during the pandemic.[4]

Concurrently, the death of George Floyd highlighted the importance of diversity, equity and inclusion (DEI) efforts in the health professional space around the globe. Is it enough to just select people who are under-represented and then expect them to serve and be successful? Dr. Gounder's conversation with Dr. Dzirasa (Chapter 3) highlights the challenges of being a Black man in medicine—and why it is so important to develop equity-awareness; and to stand up for, and support, each other as professionals on an ongoing basis. At the Washington State University Elson S. Floyd College of Medicine (WSU COM), named in honor of an inspirational African-American university president, we have been mission-driven to admit a diverse class of future doctors.[5] Our students are more likely to be the first in their family to attend college and/or medical school, to have served in the military, to have ties to the many tribes that supported the establishment of the WSU COM, or to come from under-represented groups in medicine.

As we develop these future physicians, and help them form their professional identities, it is critical that we understand the importance of the hidden curriculum, even the hidden cultural expectations in medicine. It is an opportunity for us, as academic physicians and as members of Alpha Omega Alpha Honor Medical Society (AΩA) to re-examine how we can educate for professionalism, and how we can operationalize new professional expectations in a way that promotes diversity, equity and inclusion. For example, students from non-traditional backgrounds may not have the same expectations for behavior that students raised in physician (health care professional)—parent families take for granted. Dr. Anthony Jack, author of *The Privileged Poor*,[6] points out that students from non-traditional backgrounds may view well-meaning supports like office hours as threatening, or they may even be perceived as punishment (i.e., like getting called to the principal's office; only for students who are in trouble). Thus, non-traditional students may not seek out help, fearing that they may be viewed as weak or problematic.

Dr. Oluwaferanmi Okanlami's contribution (Chapter 5) highlights the importance of avoiding assumptions about abilities and working toward full participation —viewed in its broadest sense as equity, and importantly distinguishing equity from equality. Dr. Okanlami's story clearly demonstrates that "disability doesn't mean inability." The value of his contributions and the importance of the accommodations that make his contributions possible are clear.

This brings us back to a discussion on who has access to a career as a physician. Medical schools have endeavored to define the characteristics and skills that are needed to work as a physician. The academic standards we have honed since the Flexnerian era began have been increasingly recognized as problematic; they exclude applicants by virtue of their exclusion from standardized test preparation (whether this is financial exclusion or regional access exclusion). Many schools' technical standards include fully functional vision and hearing.[7,8] Medical schools may have become more restrictive in an attempt to stave off costs for accommodations for disabilities rather than evaluating what work could be done by the person (which is what happens when a physician becomes disabled once practicing).[9]

As a profession, we must question what is equitable in conjunction with what supports can be given via technological advances, and what should be done to promote equity for our patients. We should ask that our medical schools, residencies, and employers review current policies through the lens of diversity, equity, and inclusion. We must do our very best to rethink barriers in order to promote, and gain the benefits from a diverse workforce while ensuring a sustainable training and work environment.

Professionalism as a skill and physician well-being

We need to define and agree upon new rules of professionalism that emphasize it as a skill. Dr. Fred Sanfilippo's chapter highlights the importance of defining the goals for leadership and professionalism at academic health centers (AHCs). As the last few years of rampant burnout, which has only been exacerbated by pandemic exhaustion, have shown, we cannot simply keep asking physicians to continue giving more and more until they are drowning in self-sacrifice at the feet of corporate medicine. Lapses in professionalism may be common, but they usually result from one of several causes. We need to understand the rules of professionalism, and the rules need to be humanly achievable with respect to physician wellness and sustainable work-life integration. Once the rules are understood they need to be agreed upon, and should align with the points outlined in Dr. Sanfilippo's chapter, "incentivize personal well-being and professionalism, collegiality and community-building". Individuals and groups need to facilitate the ability of everyone concerned to operationalize the expected professionalism actions (e.g., a physician-parent cannot attend to work if their child is ill and no childcare is available because of a pandemic, economic constraints, or local availability). Finally, health care systems must recognize, acknowledge and work to prioritize physicians' (and other health professionals') well-being beyond a return on investment expectation.[7]

I sincerely believe that physicians are selected and trained to put patients' needs before their own, but the incremental load of profit-making task expectations (micro and macro) has placed all physicians in jeopardy. My own practice experience in three countries[8] has taught me lessons that align with the recommendations for reform as discussed in this AΩA publication. Decreasing administrative burdens and simplifying documentation and billing requirements are imperative if we are to have time to care for patients appropriately, maintain our professional well-being, and continue to attract the best and brightest as future physicians. As leaders during this challenging time, we must define and act on a model of professionalism that does not expect endless self-sacrifice and capitulation to corporate rules. The recent push to increase transparency of, and limit requirements for, prior authorization by insurance companies is a good example of the transformation needed to improve the work of physicians and the care of patients.[9]

Once trainees have successfully achieved their professional status as physicians, we must rethink our professional obligations. Dr. Gounder points out that some health care workers have left the fight for a variety of reasons. Many public health physicians/officers have been forced out by politics.[13] Sadly, some of my colleagues have chosen early retirement, knowing they are working in a health professions shortage area. Others, facing overwhelming personal risk, illness or other circumstances, have told moving stories about their heart-wrenching decisions to discontinue clinical practice.[14] We cannot afford to lose valued colleagues' talents, skills, and contributions. The comments by Drs. Harold Paz and David Skorton regarding the revitalization and operational evolution of the American Association of Medical College's (AAMC) operational evolution outlines some important goalposts and actions that are being widely implemented in line with the AAMC's national leadership on these topics. The AAMC online newsletters provide relevant information to help navigate these challenges as a medical community.

Professionalism and educational innovation

Dr. George Thibault (Chapter 9) summarizes some of the most innovative areas of medical education. Interprofessional education (IPE), longitudinal integrated clerkships (LICs), artificial intelligence (AI), competency-based medical education (CBME) are the fires of innovation that are moving medical education forward. Despite the challenges and hardships of the pandemic, the opportunities in these areas, and technologies that overcome distance and time have been important game-changers. My IPE team has had the opportunity to educate almost 1,500 students about the care of patients using opioids in online interprofessional sessions. This would have been unimaginable only three years ago, but our students consistently appreciate that they can join the classes, complete with standardized patients and breakout discussions with their interprofessional peers, from anywhere. Our medical school has also developed a suite of online electives that enable students to earn credit when they are quarantined with COVID, need the flexibility to cope with haphazardly scheduled residency interviews, or deal with personal or family issues. And, as a physician who grew up in a rural town of 800 people, I can already appreciate how digital health and AI may vastly morph possibilities for improved access for many rural and remote patients.

Following from Dr. Thibault's insights, the pandemic has exposed an empathy deficit related to emotional exhaustion, partly stemming from our divided society.[15] As we focus on educating future physicians, caring, compassion, and empathy underpin professionalism. The landmark Dr. Maxine Papadakis (AΩA, University of California San Francisco School of Medicine, 1993, Faculty) article on professionalism identified that failure to complete paperwork or to become vaccinated as required for training were predictors of censure by medical boards.[16] These failures essentially demonstrate an unwillingness to understand and prioritize others' needs/welfare,[16] which might also be framed as an empathy deficit. The pandemic has highlighted the need for educators to embed an understanding of, and training in, caring, compassion, and empathy as a core part of physician identity formation. Fortunately, the literature on empathy has grown substantially in recent years. Empathy is not just a trait, it can be measured as work.[17] Empathy can be developed, explicitly, in interprofessional teams,[18] improving teamwork and supporting professionalism and patient care.[17,18] Finally, holistic admissions processes and curricular innovations[19,20] may be able to increase the chances that Dr. Wallace's story might continue as the norm, even as ongoing systemic challenges remain.

Professionalism and advocacy

Our professional responsibility is to speak up for whatever issues arise, large and small, and to support colleagues and call out equity issues as we can (perhaps with careful consultation about how to best craft our messages). I was asked to write an editorial for our local paper about the selection of a naturopath as the medical representative to our local public health board, as selected by the county commissioners. I am embarrassed to admit that I did so with trepidation regarding possible backlash. However, after carefully including a sports analogy about selecting the best person for the job (you wouldn't choose a tennis player, even a great one for a championship basketball team, because they wouldn't win), I then consulted with several others regarding how to get people to actually consider, rather than just react to the message that the job of the county commissioners is to select the best person based on expertise, rather than on politics. I am relieved to say that we received only positive comments about this message—but the challenges are endless.

To amplify Dr. Gounder's comments, is messaging part of leadership and professionalism? Is it advocating publicly in challenging times for what we know is right? Is it delivering practical, consumable messages that help people get past the politics?

Every single one of us must chip away at issues around equity and medical best practices on a daily basis, while turning to each other for advice and counsel about how to best build trust through the honest, clear, and consistent communication in these challenging times.

References

1. Al-Aly Z, Bowe B, Xie Y. Outcomes of SARS-CoV-2 Reinfection. Nature Portfolio. 2022; Version 1; 17 June, 2022. doi:https://doi.org/10.21203/rs.3.rs-1749502/v1.

2. DeWitt DE. Fighting COVID-19: Enabling Graduating Students to Start Internship Early at Their Own Medical School. Annals of Internal Medicine. Jul 21 2020; 173(2): 143-4.

3. Elsawy F, Malik RB, Kazi M, Ladan Z. A UK perspective on the effect of the COVID-19 pandemic on medical student career perceptions. Medical education online. Dec 2020; 25(1): 1810968.

4. Kaminskaite V, Bluemel AH. Impact of the covid-19 pandemic on medical school applicants. BMJ. Jul 8 2022; 378: o1398.

5. Washington State University. Elson S Floyd College of Medicine: Mission and Goals. https://medicine.wsu.edu/administration/mission-goals/

6. Jack AA. The privileged poor: how elite colleges are failing disadvantaged students. Harvard University Press. 2019: 276.

7. West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet. Nov 5 2016; 388(10057): 2272-8.

8. DeWitt DE. A Tale of Two Countries: How I Saw More Patients With More Joy in Internal Medicine Practice. Annals of Internal Medicine. May 2 2017; 166(9): 669-70.
9. American College of Physicians. Healthcare Workforce: Where We Stand Policy Compendium. 2022: 129-30.
10. Argenyi M. Technical Standards and Deaf and Hard of Hearing Medical School Applicants and Students: Interrogating Sensory Capacity and Practice Capacity. AMA J Ethics. Oct 1 2016; 18(10): 1050-9.
11. Stauffer C, Case B, Moreland CJ, Meeks LM. Technical Standards from Newly Established Medical Schools: A Review of Disability Inclusive Practices. J Med Educ Curric Dev. Jan-Dec 2022; 9: 23821205211072763.
12. McKee M, Case B, Fausone M, Zazove P, et al. Medical Schools' Willingness to Accommodate Medical Students with Sensory and Physical Disabilities: Ethical Foundations of a Functional Challenge to "Organic" Technical Standards. AMA J Ethics. Oct 1 2016; 18(10): 993-1002.
13. Mello MM, Greene JA, Sharfstein JM. Attacks on Public Health Officials During COVID-19. JAMA. Aug 25 2020; 324(8): 741-2.
14. Rosenbaum L. Once Upon a Time...the Hero Sheltered in Place. NEJM. July 9 2020; 383(2): e5.
15. Blow CM. The Pandemic Exposed Our Empathy Deficit. New York Times. April 27, 2022. https://www.nytimes.com/2022/04/27/opinion/pandemic-empathy-hardship.html.
16. Papadakis MA, Hodgson CS, Teherani A, Kohatsu ND. Unprofessional behavior in medical school is associated with subsequent disciplinary action by a state medical board. Academic Medicine. Mar 2004; 79(3): 244-9.
17. Larson EB, Yao X. Clinical empathy as emotional labor in the patient-physician relationship. JAMA. Mar 2 2005; 293(9): 1100-6.
18. Adamson K, Loomis C, Cadell S, Verweel LC. Interprofessional empathy: A four-stage model for a new understanding of teamwork. Interprofessional Care. Nov 2018; 32(6): 752-61.
19. Yaden M, Yaden D, Buffone A, et al. Linguistic analysis of empathy in medical school admission essays. Int J Med Educ. Sep 18 2020; 11: 186-90.
20. Hojat M, DeSantis J, Shannon SC, Speicher MR, et al. Empathy as related to gender, age, race and ethnicity, academic background and career interest: A nationwide study of osteopathic medical students in the United States. Medical Education. Jun 2020; 54(6): 571-81.

NOTES

Alpha Omega Alpha Honor Medical Society
12635 E. Montview Blvd., Suite 270
Aurora, Colorado 80045
ISBN # 979-8-218-06551-5

ISBN 979-8-218-06551-5
90000>
9 798218 065515