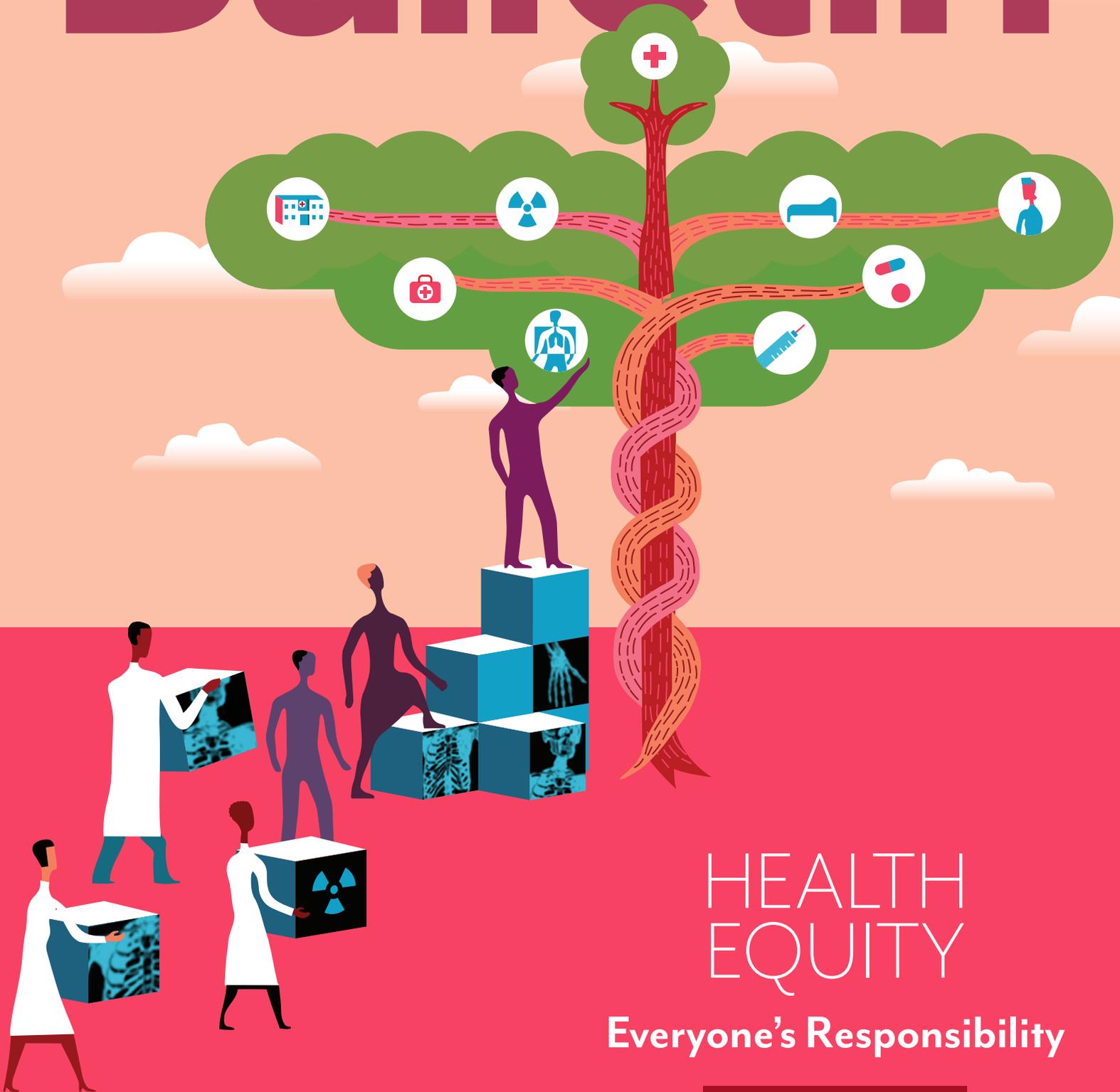


# Bulletin



HEALTH  
EQUITY

Everyone's Responsibility

SPECIAL SECTION

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**OUR MISSION:** The *ACR Bulletin* supports the American College of Radiology's Core Purpose by covering topics relevant to the practice of radiology and by connecting the College with members, the wider specialty, and others. By empowering members to advance the practice, science, and professions of radiological care, the *Bulletin* aims to support high-quality patient-centered healthcare.

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# Health Equity in the Spotlight

This month, we're exploring the connection between radiology and improved access to care.

The issue of health inequity is very real. Health equity is considered to be achieved only when every person has the opportunity to “attain his or her full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.” Health inequities are reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment.<sup>1</sup>

In my capacity as a radiologist, I've had the opportunity to evaluate and consult in other countries where access to medical imaging healthcare is dramatically less than what we would consider to be standard for the U.S. The contrasts are glaring.

Within the U.S., disparities between groups can be just as glaring. Especially as radiologists who view our exams in shades of gray, we often don't appreciate, from the perspectives of our patients, the differences in care depending on demographics. Yet the data is not only compelling but overwhelming. For example, in 2011–2014, the prevalence of diabetes was 18% in non-Latinx/Hispanic Black adults, 16.8% in Latinx/Hispanic adults, and 9.6% in non-Latinx/Hispanic white adults. In 2015–2016, Latinx/Hispanic (47%) and non-Latinx/Hispanic Black (46.8%) adults had a higher prevalence of obesity than non-Latinx/Hispanic white adults (37.9%). Research shows that where one lives is a greater predictor of one's health than individual characteristics or behaviors. Life expectancy in the U.S. also varies dramatically — by roughly 15 years for men and 10 years for women — depending on income level, education, and where a person lives.<sup>2</sup>

Radiology is part of the problem as well. Safdar and Betancourt et al. have written excellent articles in the *JACR*<sup>®</sup> recently highlighting the health inequities related to medical imaging and interventional care and services.<sup>3,4</sup>

The Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine published a report in 2017, *Communities in Action: Pathways to Health Equity*.<sup>5</sup> The report describes nine determinants of health that are drivers of health inequities: income and wealth, housing, health systems and services, employment, education, transportation, social environment, public safety, and physical environment. This

report is the first in a series of activities undertaken by the National Academy of Medicine's Culture of Health program, a multiyear collaborative effort funded by the Robert Wood Johnson Foundation.

Health inequity is costly for the U.S. with respect to healthcare expenditures, national security, business viability, and economic productivity, according to the report. For example, a 2009 analysis found that eliminating health disparities for minorities from 2003–2006 would have reduced direct medical care expenditures by \$229.4 billion.<sup>6</sup>

Especially as radiologists who view our exams in shades of gray, we often don't appreciate, from the perspectives of our patients, the differences in care depending on demographics.

It will take local, state, and national leadership in the public and private sectors to improve the underlying conditions of health inequity. Advancements in the use of large disparate, population-based data with sophisticated analytic tools may allow us to be more focused on possible solutions. Most promising are numerous examples of community- and local-based programs that are taking action against health inequities across the U.S.

As good citizens, we strive to ensure equal opportunity for everyone. Especially as physicians, we dedicate ourselves to optimizing medical care for all our patients. Health equity is an important component of those moral and ethical ideals. Information in this special edition of the *Bulletin* can help us and our practices take an active role and help contribute to achieving health equity for our patients and our communities. **B**

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Journal of the American College of Radiology

## Call for Papers: Health Equity

The *JACR*<sup>®</sup> is exploring the intersection of social justice and health equity in radiology. Concept proposals are due Oct. 30. For more information, visit [acr.org/EquityCall](http://acr.org/EquityCall).

## Harvey L. Neiman Health Policy Institute® Announces New Executive Director



Elizabeth Y. Rula, PhD, has been named the new executive director of the Harvey L. Neiman Health Policy Institute® (HPI). Rula will oversee the HPI's entire extensive research portfolio in the areas of utilization, health policy, access and quality, and alternative healthcare models. She will also manage relationships with contracted research sites — including the Health Economics and Analytics Lab (HEAL) Center at Georgia Tech (Georgia Institute of Technology) and the Imaging Policy Analytics for Clinical Transformation (IMPACT) project at Emory University.

“Dr. Rula is a strategic leader with proven success developing and executing a broad program of research, publications, and thought leadership,” says ACR CEO William T. Thorwarth Jr., MD, FACR. “Her work will support strategic initiatives and innovation, build market credibility, inform health policy, and establish strong, evidence-based value propositions for radiology.”

Rula has served as a healthcare leader for more than a decade, with extensive experience overseeing science-based research and analytics, most recently as executive director of research and thought leadership at Tivity Health. She has authored dozens of peer-reviewed publications and spoken at numerous conferences and events on various population health topics. Rula succeeds Danny R. Hughes, PhD, who led HPI to achieve many remarkable milestones from its inception in August 2012.

For additional information, visit [neimanhpi.org](http://neimanhpi.org).

## SPR Courses Move Online

The Society for Pediatric Radiology (SPR) is dedicated to fostering excellence in pediatric healthcare through imaging and image-guided care. In the wake of COVID-19 and the increase in demand for online education, SPR is offering the following online learning opportunities:

### Pediatric and Congenital Cardiac Imaging

Don't miss a beat with SPR's new monthly cardiac webinar series. The first one-hour segment of the series will feature presentations on neonatal cardiac CT by Prakash M. Masand, MD, and Joshua R. Pohlman, MD, on Thursday, Sept. 17, at 12:00 PM ET.

### Body MRI

This live online course will feature two-and-a-half days of didactic lectures and case discussions covering topics such as MRI basics, advances in MRI techniques, MRI and oncology, thoracic imaging, and MRI of the liver, pancreas, and biliary tree. Upon completion of this course, participants will understand basic and advanced techniques in body MRI, as well as recognize and apply these techniques for advanced diagnosis and improved management. The course takes place Sept. 25–27.

For more information, visit [pedrad.org/Events/SPRMeetings](http://pedrad.org/Events/SPRMeetings).

## Is a New Job in Your Near Future?

The ACR Career Center, one of the most accessed member benefits, is actively responding to the evolving transition of employment among radiology professionals.

Post your resume online today to make sure you're noticed — whether you're supplementing income because of reduced hours or are seeking a brand new opportunity as communities reopen.

Creating an account will allow you to access resources, take advantage of the CV review service, and receive customized Job Alert emails applicable to your specialty and location interests. In addition, you are able to pursue career counseling that includes interview advice at your convenience.

Find a job today at [acr.org/CareerCenter](http://acr.org/CareerCenter).

## NOW AVAILABLE:

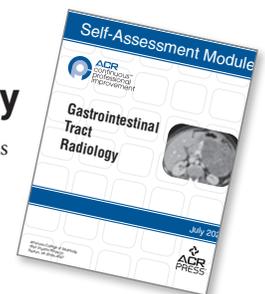
### CPI Module in GI Tract Radiology

Test your knowledge and improve your diagnostic imaging skills with the new Gastrointestinal Tract Radiology Module 2020 by the ACR Continuous Professional Improvement (CPI) program. The module, co-chaired by Peter S. Liu, MD, and Ryan B. O'Malley, MD, features:

- Modern hepatobiliary MRI, spanning topics such as liver lesion characterization, imaging the cirrhotic liver, biliary pathology, and biliary anomalies
- Advanced oncologic CT, including unusual tumors and tumor-like conditions
- Practical topics in GI fluoroscopy

Each CPI module is designed to be a comprehensive learning experience, broad enough to meet the educational needs of general diagnostic radiologists, subspecialists, and residents. Test your knowledge in 50 self-assessment questions and earn 8 CME/SA-CME. Choose your format (print or online) and download the free e-book copy. Members save \$35 per module when bundling six modules via a CPI Select Six.

Learn more at [acr.org/cpi](http://acr.org/cpi).



## Comment on the 2021 ACR Practice Parameters and Technical Standards

The ACR periodically reassesses and redefines its Practice Parameters and Technical Standards (PP&TS) to help advance the science of radiology and ultimately improve patient care. The ACR will collect comments on the 2021 PP&TS during four field reviews: Aug. 17–Sept. 4; Sept. 7–Sept. 25; Sept. 28–Oct. 16; and Oct. 19–Nov. 6.

The following documents will be reviewed during the first field review cycle (Aug. 17–Sept. 4):

- ACR–SAR–SPR Practice Parameter for the Performance of Abdominal Radiography
- ACR–SPR–SSR Practice Parameter for the Performance and Interpretation of MRI of the Elbow
- ACR–SPR–SSR Practice Parameter for the Performance and Interpretation of MRI of Bone, Joint, and Soft Tissue Infections in the Extremities
- ACR–ASNR–SPR Practice Parameter for the Performance of CT of the Extracranial Head and Neck
- ACR Practice Parameter for the Performance of MRI-Guided Breast IR Procedures
- ACR Practice Parameter for the Performance of a Diagnostic Breast US Examination
- ACR Practice Parameter for the Performance of US-Guided Percutaneous Breast IR Procedures
- ACR–ACNM–SNMMI–SPR Practice Parameter for the Performance of Skeletal Scintigraphy (Bone Scan)
- ACR–ACNM–SNMMI–SPR Practice Parameter for the Performance of Hepatobiliary Scintigraphy
- ACR–SIR–SPR Practice Parameter for the Performance of Inferior Vena Cava Filter Placement for the Prevention of Pulmonary Embolism

The new and revised PP&TS will be available on the ACR website as soon as final approvals from collaborating societies have been received, but no later than September. The updated Practice Parameter will be effective on Oct. 1, 2020.

To comment, visit [acr.org/PPTS-Field-Review](https://acr.org/PPTS-Field-Review).

“ Sometimes patients may feel like they have to make an impossible choice — whether they would like to risk their cancer becoming incurable by delaying treatment or whether they would like to risk contracting COVID-19 by leaving the security of their home to obtain treatment.

— Anupriya Dayal, MD, radiation oncologist at Temple Health-Fox Chase Cancer Center, at [bit.ly/VOR-COVID19](https://bit.ly/VOR-COVID19)

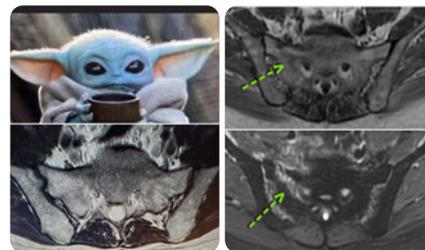
## Heard on Social Media



**Anthony D. Kuner, MD**

@KunerMD

Strengthen your lumbar #spine search pattern: Always check on Baby Yoda! Although the focus of spine imaging is the presacral vertebrae, always check for sacral fracture. Not uncommon given prevalence of osteoporosis. Look & find them, you will. Forget, you will not. #radres



July 12, 2020



**Geraldine B. McGinty, MD**

@DrGMcGinty

#challengeaccepted on behalf of the original #radxleader and sharing my review of #Radioactive which unfortunately does not do her justice <https://ift.tt/2Eth53l>



July, 2020



**Toma S. Omofoye, MD**

@TomaOmofoyeMD

I was recently reminded that <2% of acad radiologists are black. ~27% Rads are female. Thanks for the invitation @snma and for the Sowing Seeds series. I'm excited to recruit some #URM #medstudents to #radiology! #DiversityandInclusion #BlackWomenInMedicine



July, 2020

# Providing Healthcare to the Most Vulnerable

**Medicaid, already the largest payer in the nation, is about to get larger as millions lose private health insurance as a result of COVID-19.**

**M**edicaid, the largest payer in the U.S. healthcare system, is of significance to almost all in the industry. Many members of the College are familiar with the program, but for those who aren't, I hope this column will help clarify the fundamentals of Medicaid — allowing for a better understanding of its current and future role.

Enacted as part of the Social Security Act Amendments of 1965 (the same legislation that created Medicare), Medicaid is an entitlement program giving eligible individuals rights to payment for medically necessary healthcare services. By 2019, the program covered 76 million Americans, accounted for nearly 20% of the nation's personal healthcare spending, and played a particularly important role in financing healthcare costs for impoverished children, adults with disabilities, and nursing home residents.

Medicaid is a federal/state partnership, with CMS accountable for implementing the program while individual states are responsible for its administration. Within broad guidelines, states are at liberty to define covered populations, services, healthcare delivery models, and payment methods. As one can imagine, variability is the rule, rather than the exception, in Medicaid programs, and there are substantial differences from state to state — with covered population percentages varying from 10% in Utah to 33% in New Mexico. Funding is jointly but not equally shared, with federal support (known as the federal match rate) determined by the wealth of a given state and ranging from 50% of Medicaid costs for the wealthiest states to 75% for the poorest.

In 2010, the Affordable Care Act expanded Medicaid to cover those under the age of 65 and earning below 138% of the federal poverty level (\$17,236 per annum for an individual with no dependents). To date, 38 states and the District of Columbia have adopted Medicaid expansion and 12.5 million of the newly eligible have enrolled. Although 12 states have not yet expanded their

rolls, the politics of expansion appear to have changed and the number of states doing so is expected to grow. Expansion enrollees are funded by the federal government at a significantly higher rate (90% of Medicaid costs) than pre-expansion populations, which is of particular significance for state budgets during times of economic stress.

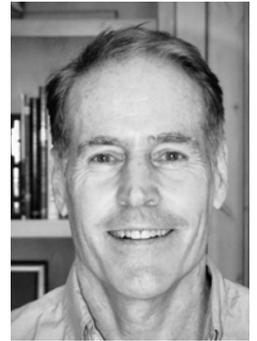
Many studies now indicate that Medicaid expansion has had positive effects on a variety of outcomes, starting with a reduction in the overall uninsured rate. More specifically, there has been an improvement in racial imbalances affecting both access to and utilization of healthcare. Overall, expansion appears to have significantly narrowed but not entirely closed the income and race-based gap in healthcare utilization. This is encouraging, but the elimination of socioeconomic health disparities depends on far more than a robust, equitable healthcare system. Much that influences the diseases afflicting disadvantaged Americans is independent of healthcare.

That said, the beneficial effects of Medicaid are many and there is now ample evidence of Medicaid's role in reducing poverty and inequality: income, economic mobility, attainment of higher education and even tax paid increases in populations who have had access to the program at some point in their lifetimes.

COVID-19 has major implications as Medicaid is a counter-cyclical program, seeing enrollment growth during economic downturns — which consequently pressures state budgets as tax revenues fall. Assumptions of stable Medicaid enrollee numbers in 2020 and very modest spending growth have changed dramatically over the past months.

Nearly all states now project growth in Medicaid enrollment over the coming years and it is estimated there will be 17 million Americans newly eligible by January 2021 — at which time state tax revenues may have decreased by 50%. The federal government has responded by authorizing a 6.2% increase in the federal match rate (which, as discussed above, applies to states' pre-expansion Medicaid populations), given the intensity of the downturn and the consequent effects on state revenues.

Medicaid is about to get larger as millions lose private health insurance as a result of the COVID-19 pandemic. The program will continue to play its intended role, ensuring the provision of healthcare to America's most vulnerable. **B**



**Neil C. Davey, MBChB,  
FACR, Chair,  
ACR Medicaid Network**

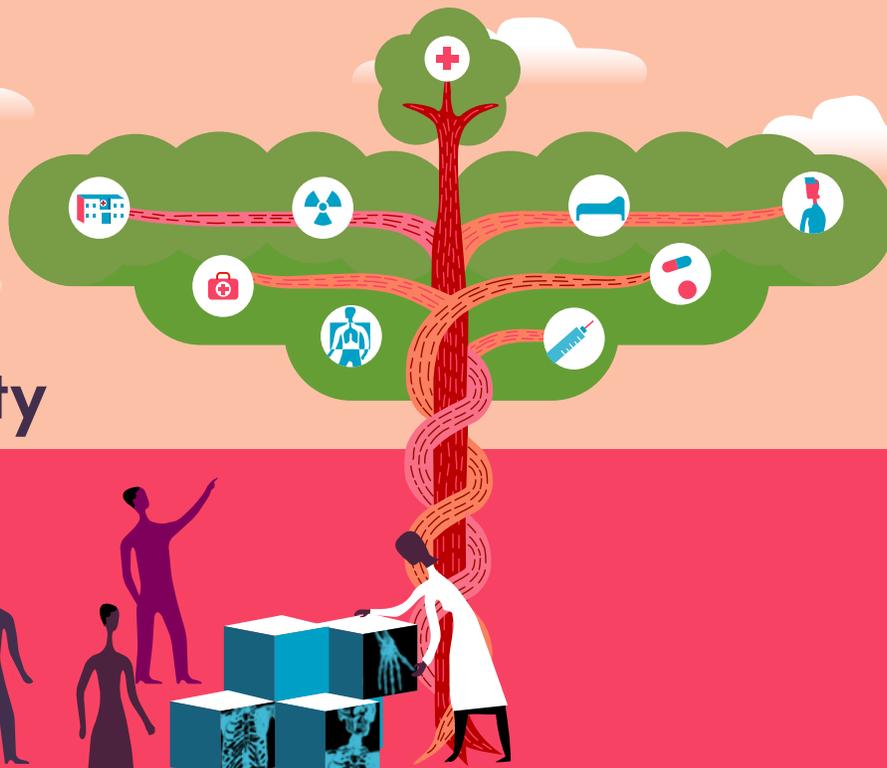
*Guest Columnist*

## ENDNOTES

Full list of references available in the digital edition at [ACR.org/Bulletin](https://www.acr.org/Bulletin).

# HEALTH EQUITY

## Everyone's Responsibility



Radiologists are in a unique position to lead efforts to address health disparities and accommodate the needs of diverse patients.

COVID-19 is a magnifying glass that has highlighted the larger pandemic of racial/ethnic disparities in health. Emerging data show that racial/ethnic minorities have been disproportionately affected by COVID-19.<sup>1</sup> Socio-economic factors and pre-existing medical conditions like hypertension are likely contributing factors to this disparity. Furthermore, limited English proficiency may introduce additional linguistic and health literacy barriers to care — potentially resulting in delays seeking medical attention and greater severity of disease at the time of admission to the hospital with COVID-19 infection.

Disparities in access to care and disease severity are not limited to linguistic barriers. Racial/ethnic non-white communities disproportionately experience lower socioeconomic status, adding another layer of complexity when accessing care. Living and working arrangements also likely play a role in the severity of COVID-19 among these patients.<sup>2</sup>

Recognizing the barriers is the first step in the call to action to address racial and ethnic disparities. Physicians can help patients overcome these obstacles, and we, as radiologists, are uniquely poised to make that happen. In radiology, we sit at the crossroads of every specialty. We are in a prime place to inspire broad change and to create teams that are focused on addressing disparities. We can spur collaborations with other medical specialties, community stakeholders, and initiatives to enhance the effectiveness of public health interventions that increase access to care.

We cannot have a high-quality healthcare system if the care we provide is not equitable. The goal of this issue is to not only provide a better understanding of the emerging disparities, but to craft a better path towards equity — together.

**By Efrén J. Flores, MD, officer of radiology community health improvement and equity at Massachusetts General Hospital, and Nicole B. Racadag, MSJ, managing editor, *ACR Bulletin***

# Learning From Crisis

Across the country, the pandemic has thrown inequities in the healthcare system into the spotlight — and radiologists believe this visibility might actually spur change.

In March, just as the pandemic was heating up on the East Coast, staff at Massachusetts General Hospital's Chelsea Healthcare Center quickly realized its location — just four miles from Boston — had all the earmarks of a possible COVID-19 hot spot. Not only were COVID-19 patients showing up at the Center in greater numbers than MGH's Boston campus, but they also had noticeably more severe disease, as shown on chest X-rays.<sup>1</sup>

With a population of 40,000 packed into 2.2 square miles, Chelsea is the smallest and most densely populated city in Massachusetts. Most of the residents identify as Hispanic or Latinx and speak a language other than English at home. Median income is significantly lower than Boston; one in five residents live below the poverty line. Many residents are essential workers in restaurants, childcare facilities, sanitation departments, and manufacturing plants — who can't work from home and often don't get paid leave if they get sick.

Physicians and staff at Chelsea Healthcare Center knew the community well, says Patricia Daunais, (R) RTR, operations manager for the imaging department at the clinic, an affiliate of MGH. “But COVID-19 put it really front and center how the demographics here could actually make the community so much sicker compared to other communities,” says Daunais. “This community just was not a candidate to stay safe.”

Chelsea is not an outlier in this. Across the country, the COVID-19 pandemic has thrown inequities in our healthcare system into the spotlight. And that might actually be a good thing.

## Bringing Health Disparities in the Spotlight

Just as the death of George Floyd brought systemic racism to the fore, COVID-19 has pushed health disparities into the spotlight. “We now see how we've been failing different populations in our community,” says Lucy B. Spalluto, MD, MPH, vice chair of health equity at Vanderbilt University Medical Center (VUMC) in Nashville, Tenn. According to Spalluto, the concurrence of these events has magnified the urgency. “All of a sudden, the whole world became much more aware of the need for change,” she says.

The best care in the world does little good for those who cannot access or afford that care, who do not have the resources to follow treatment recommendations, who do not speak English, or who do not feel welcomed by the healthcare system. COVID-19 points that out like nothing before, says Arun Krishnaraj, MD, MPH, director of body imaging for the University of Virginia Medical Center and chair of ACR's Commission on Patient- and Family-Centered Care. From the moment stay-at-home orders were issued and non-essential businesses were shuttered, the country was divided — between those who were able to follow recommendations and those who could not.

While white collar workers adapted to working from home, essential workers still had to stock grocery stores or work in the food service industry — often arriving by public transport. Some patients without symptoms had the luxury of getting tested for COVID-19 just out of curiosity, while others experiencing symptoms avoided testing because they couldn't afford to be sick. Those living in suburban houses with separate bedrooms voluntarily self-quarantined, while those in congregate housing and multi-generational households had no way to isolate themselves from sick family members.

“When the CDC finally released data on deaths by race, ethnicity, and other factors, it became very apparent that Blacks and those who were Latinx/Hispanic were having much higher death rates than other groups,” says Krishnaraj. “Native Americans were also seeing disproportionately high rates of infection in their communities.”

“Why does being Black or Latinx/Hispanic mean you have to die at a higher rate?” asks Krishnaraj. Answering that question may help identify the root causes of health disparities, start closing the gaps, and lead to a more equitable healthcare system, he says. “Perhaps good can come from a crisis like this,” Krishnaraj says. “It can shine a spotlight on the issue. The recognition may compel people to act and put into place systems that could minimize or eliminate health disparities. That's the hope.”

## Increasing Awareness to Drive Change

According to Spalluto, the pandemic has created a lot of necessary interest at the local, community, and national level in understanding what health disparities are and why they exist. “I hope that this very trying time will drive necessary change in our healthcare system,” she says.

In 2016, VUMC established the Office of Health Equity to coordinate and support equity efforts across the institution. “They really try to drive all the departments toward better care and encourage collaboration and cooperation to meet the needs of diverse populations and help build trust in communities,” Spalluto says. “A key piece of this is diversifying the healthcare workforce to better meet the needs of diverse populations.”

“Health equity needs to be integrated into the full triad of academic radiology departments: research, clinical work, and teaching,” she says. “There is systemic racism and bias within our healthcare system, and we need to recognize that if we want to move forward.” According to Spalluto, VUMC prioritizes research projects that involve underserved and underrepresented populations, all while encouraging patient-, family-, and community-centered care that ensures patients from widely diverse backgrounds feel safe in the radiology care environment.

Krishnaraj recognizes that building trust in the current health system is an uphill climb, especially in marginalized communities that have more than ample reasons to distrust the system. Although the progress towards a possible vaccine against COVID-19 gives him hope, he fears that those who need it most will not be willing to get it or to participate in the clinical trials. The Tuskegee experiments and exploitation of Henrietta Lacks eroded trust in the healthcare system, especially among Black patients, he points out. Wealth and education gaps don't help either. "Members of marginalized populations may have perceptions like, 'this isn't the place for me' or 'this isn't a situation that I feel comfortable with,'" he says. "And that's where patient-centered care comes in."

### Making Patient-Centered Care the Cure

Connecting with patients in ways that put them at ease and help them engage in their care is the key to building back trust and addressing health disparities laid bare by COVID-19, says Krishnaraj. "The primary way we can do this is to ensure that each patient receives the same amount of education, support, guidance, and empowerment throughout the care process," he says.

For example, patients who speak English have opportunities to ask questions and become active and engaged partners in their care and in shared decision-making, resulting in better outcomes. Patients who speak a language other than English have a much harder time — even with an interpreter available by phone. "We're not connecting with these patients because we don't speak their native language, thus we're not as familiar with what their needs are," Krishnaraj says. As a result, they are less likely to follow up on care and more likely to miss appointments.

Reframing these situations from non-adherence and no-shows to "missed imaging care opportunities" (a term coined by Efrén J. Flores, MD, officer of radiology community health improvement and equity at MGH) can make all the difference, Krishnaraj says. Something as simple as a voucher for a shared ride service or help filling out a Patient Assistance Programs application can solve a problem like getting to an appointment or filling a prescription. "The first part is just asking the question about what patients need or what challenges they face," he says. "Even if the radiology department doesn't have the resources to address the problem, raising awareness of the issues patients face when trying to access care can lead to greater compassion and empathy and improve care for patients."

Krishnaraj gives the example of colonoscopy. Black people are at higher risk for colon cancer and are also less likely to

come in for screening. The preferred screening tool — colonoscopy — requires a full day off from work, which is difficult for many people. However, CT colonography offers an alternative that doesn't require anesthesia and is less costly, both in terms of time and money. "How can we increase the awareness and access to CT colonography among Black people to improve health outcomes?" he asks. Questions like that can lead to new approaches and solutions that help close gaps in care.

Spalluto urges radiologists to meet their patients face-to-face so they can better understand their needs and build trust with them. While that may be harder than ever while wearing PPE, she says, it's more important than ever. "We need to help patients feel safe in the healthcare environment, especially patients who were not feeling safe or welcome even before COVID-19." Spalluto says the increased awareness and discussions about health disparities in her community and across the nation have given her new hope. "It will drive solutions to address those health disparities." **B**

By Emily Paulsen, freelance writer, ACR Press

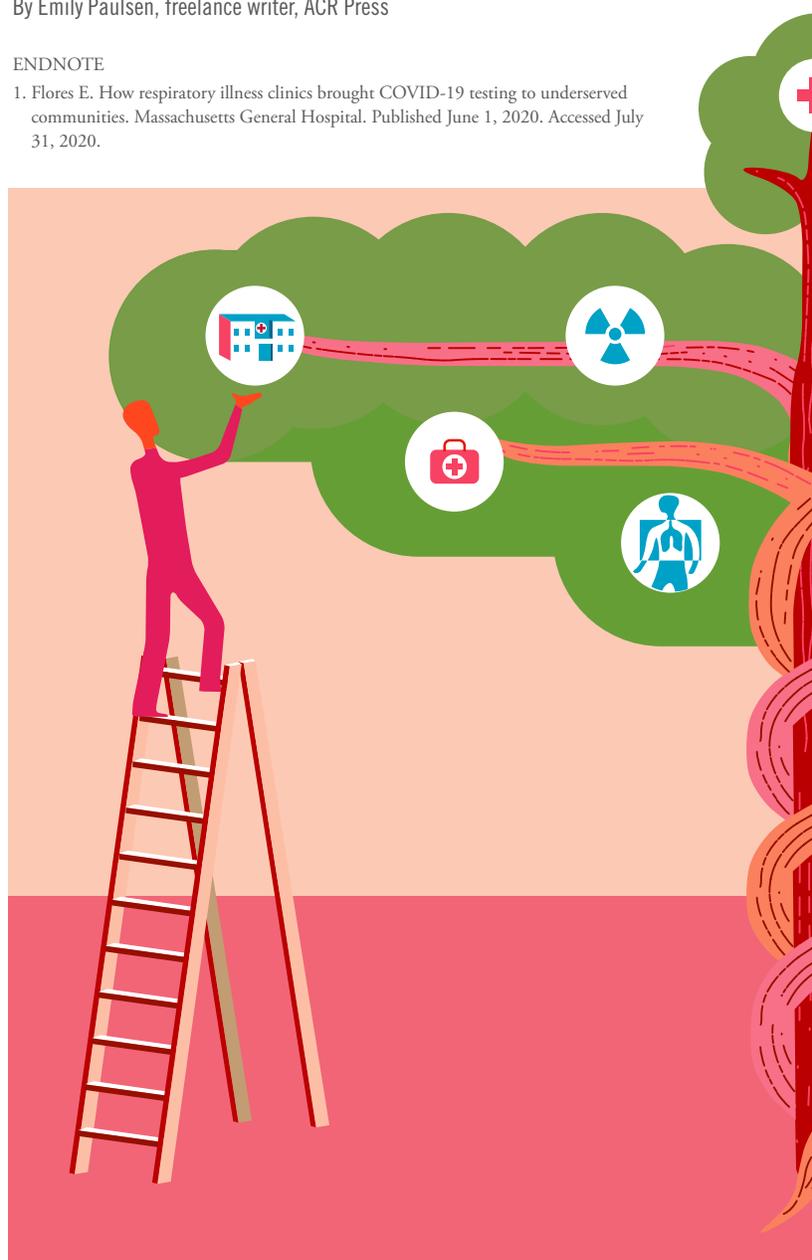
#### ENDNOTE

1. Flores E. How respiratory illness clinics brought COVID-19 testing to underserved communities. Massachusetts General Hospital. Published June 1, 2020. Accessed July 31, 2020.



PHM in Your Practice  
PODCAST

To learn more about how the MGH team worked to address health equity issues in the Boston area, particularly those related to COVID-19, listen to the *Bulletin's* PHM in Your Practice podcast at [acr.org/PHMpodcast](https://acr.org/PHMpodcast).



# Breaking Down Barriers

Radiologists may hold the key to decreasing health disparities among minorities with potential lung cancer.

Black Americans have the highest lung cancer mortality rate in the U.S. Like many other minority populations, this community faces severe health disparities due to bias and access barriers.<sup>1</sup> However, proper community outreach programs can help close the health equity gap. The *Bulletin* spoke with Ashley E. Prosper, MD, assistant clinical professor of radiology at the University of California, Los Angeles (UCLA), to talk about her ACR Innovation Fund grant-funded community outreach project, screening barriers among Black people, and how physicians earn the trust of underserved communities.

## How did your project get started?

I am a co-director of the lung cancer screening (LCS) program at UCLA, along with Brett Schussel, NP, and Denise R. Aberle,

MD, professor of radiology at the UCLA School of Medicine, who was the principal investigator of the National Lung Cancer Screening Trial (NLST). The degree of increased morbidity and mortality that plagues the Black community when it comes to cancer is astounding. Black men in particular have the highest degree of mortality and the highest risk of developing lung cancer of any racial or ethnic group. This is concerning because Black men consume less cigarettes, on average. In reviewing the NLST, we noticed that Black patients experienced the greatest improvement in mortality reduction when provided with low-dose chest CT (LDCT) screening.<sup>2</sup>

I realized we needed a pipeline between LDCT and the community that needs it most. The goal of this project is to coordinate outreach sessions with churches and community groups and develop educational tools such as videos and a website — specifically for the Black community to make sure that the public is aware of this elevated risk to this population and understands just how powerful of a tool LDCT screening can be.

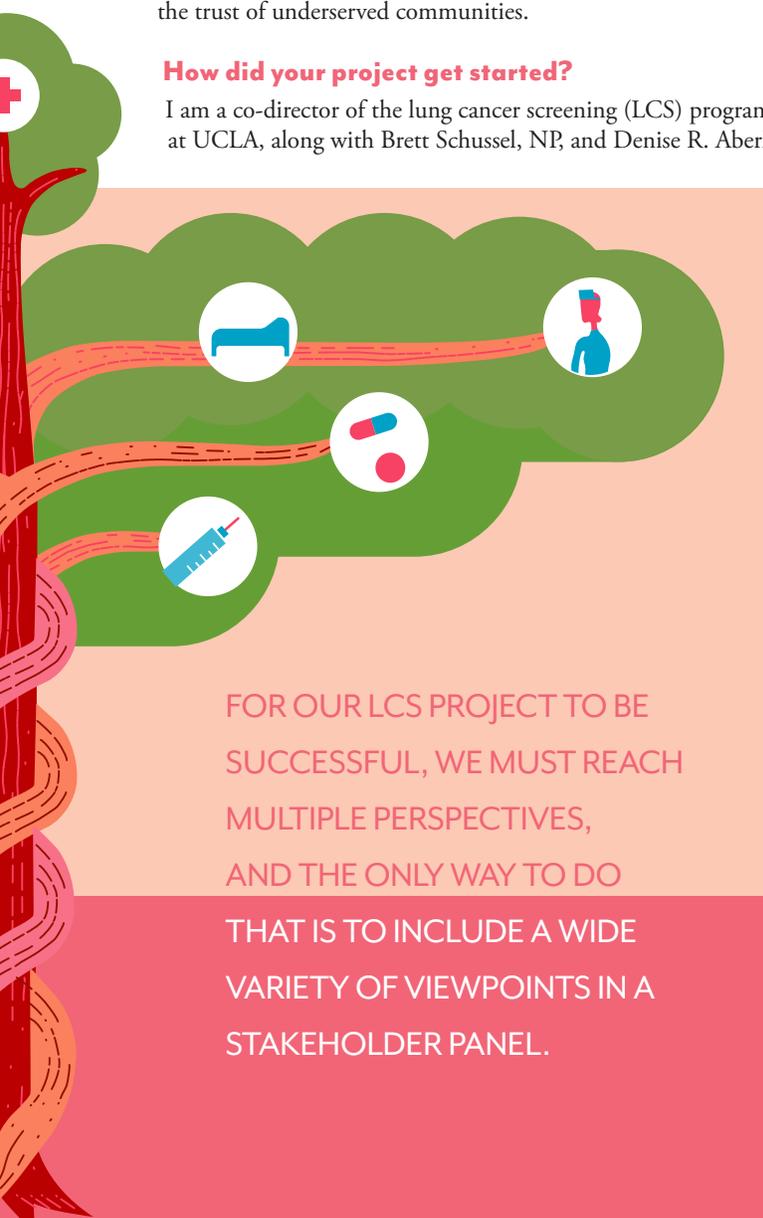
## Why is it important for public health interventions to involve stakeholders from these communities?

LCS is a population health issue. To operate in the field of population health, you must utilize nontraditional approaches, methods, and partnerships. While I happen to be a Black physician, that doesn't mean that my views represent those of the entire Black community. For our LCS project to be successful, we must reach multiple perspectives, and the only way to do that is to include a wide variety of viewpoints in a stakeholder panel. This is not a one-time discussion either. You should have ongoing feedback from the very beginning to the end of the project.

Another thing to keep in mind is establishing trust in the communities that the programs are hoping to reach. The Black community has unfortunately had a dark history with medicine and science, including studies that took advantage of vulnerable Black patients. The last thing I'd want to do is propose any outreach project to an underserved community without community representation. I want to make sure the community is represented and has an opportunity to shape and inform the policies and deliverables of an outreach project.

## How can radiologists work with PCPs to find out who is eligible for screening, when to screen, and establish workflows for shared decision-making?

There are a couple of things I'd advocate for. The first is establishing LCS as a health metric in your health system. Cancer screening exams such as breast cancer, colorectal cancer, and cervical cancer screening are already widely adopted as health measures within primary care. Recognition of LCS as an important health metric facilitates implementation of tools to increase the number of



FOR OUR LCS PROJECT TO BE SUCCESSFUL, WE MUST REACH MULTIPLE PERSPECTIVES, AND THE ONLY WAY TO DO THAT IS TO INCLUDE A WIDE VARIETY OF VIEWPOINTS IN A STAKEHOLDER PANEL.

*continued on page 15*

# What Matters

COVID-19 has ignited a call for change in thinking about those most in need — and how the country’s overall health is interconnected.

“There has been a lot of work on health equity for years, and it has been a slow process,” says Joseph R. Betancourt, MD, MPH, chief equity and inclusion officer of Massachusetts General Hospital (MGH). “COVID-19, in a very aggressive way, has demonstrated the impact of being inattentive.”

Health equity is the principle that quality of care should not vary based on patient characteristics, such as race or ethnicity. Racial and ethnic disparities in quality of care contribute to disparities in health outcomes and higher costs — and radiology is not exempt.<sup>1</sup>

“The work on health equity from a clinical standpoint has been driven by an understanding that if we care about quality and safety, then we need to monitor the variations in quality of care based on personal characteristics,” Betancourt says. “It has been this steady kind of drip, drip process — not comprehensive and not holistic,” he says. “What COVID-19 has really done is draw attention to all factors, all at once, that create systemic disparities in healthcare.”

A recent spotlight on long-standing social injustices has drawn out a new moral sense within the medical community — we need to do better than we’re doing, Betancourt says. “Facing down inequities is not just about what happens inside the walls of healthcare, but what is happening outside as well,” he says.

## Community Matters

“Community has become so important during this pandemic,” says Shlomit A. Goldberg-Stein, MD, associate professor of radiology at Einstein Medical School and director of operational improvement for the department of radiology at Montefiore Medical Center in the Bronx, N.Y. When you are in touch with your community, you have a better chance of hearing, locally, their healthcare needs and concerns with getting services during COVID-19 and beyond, she says. “With COVID-19, we are seeing different groups of people with different ideas around the country behave in very, very different ways in terms of social responsibility — fear or no fear, compliance or no compliance.”

This mixed response puts underrepresented minorities (URMs) — who already face many risk factors — more at risk during the pandemic, Goldberg-Stein says. These groups already have higher rates of hypertension, diabetes, and asthma. They are also disproportionately affected by housing issues, crowding, public transportation, and all the things that set people up for poor outcomes during a pandemic.

“Our staff come directly from the community we serve,”



Goldberg-Stein says. “So when you have this sense of community responsibility and caring — maybe more importantly a thread of shared language, understanding, and experiences — there is a much better level of coordination and communication,” she says. “And we promote from within, especially in radiology.” That leads to diverse imaging leaders, imaging managers, and operations managers, she says. “Many have long-term relationships with patients and providers.”

These types of relationships break down barriers to equity in healthcare. “Right now, we’re dealing with patients fearful to return for care,” says Goldberg-Stein. It matters when leaders can communicate through a diverse staff — it encourages more outreach, Goldberg-Stein believes, and help direct necessary and appropriate imaging care delivery.

## Communication Matters

What could be scarier for patients facing COVID-19 than an inability to communicate with the healthcare professionals dedicated to helping them? Language barriers are often a challenge for underserved communities trying to navigate the healthcare system. COVID-19 compelled some institutions to act quickly to help patients marginalized because of their native language or cultural differences.

“Our goal with RadTranslate™ was to provide simple, one-way communication — and to free up interpreter services for more complex two-way patient encounters,” says Marc D. Succi, MD, executive director of the MESH™ Incubator at MGH. “The application gives the patient a better care experience in their native language.” MESH is an in-house innovation group and prototyping lab developed within the MGH radiology department to create



targeted products and services that meet real clinical needs at the ground level ([read more at acr.org/MESH-MGH](https://www.acr.org/MESH-MGH)).

RadTranslate ([www.radtranslate.com](https://www.radtranslate.com)) plays audio clips in multiple languages to help RTs and nurses care for patients during exams and procedures. Any institution can access the tool, which features clips on screening mammography, COVID-19 screening, and other imaging services. The idea for the tool was brought to Succi by the Diversity, Equity, and Inclusion Committee at MGH, who keenly identified the need early in the COVID-19 crisis.

Before implementing the tool, Succi says, “Our only other option was to speak with an interpreter in-person or on the phone — a big delay — or to mime instructions in broken Spanish or Mandarin. That’s sub-optimal patient care and not inclusive,” he says. “This application was and will continue to be crucial during COVID-19 in our clinics.” Betancourt hopes efforts like this will help address patient challenges like inadequate communication, a lack of trust between physicians and underserved patients, and implicit bias and stereotyping. If COVID-19 hasn’t demonstrated the link between social determinants and healthcare inequity, Betancourt asks, what kind of burning platform will it take?

### Commitment Matters

The pandemic has ignited a call for a change in thinking about those most in need — and how the country’s overall health is interconnected. Things are different now, Betancourt says. “We’ve never had a real-life case study that shows how underinvestment in public health — particularly in the care of more vulnerable communities — can shut us down,” he says.

“Before COVID-19, a handful of vocal medical experts, advocates, and activists were trying to get leadership to care and

invest in more equitable care,” Betancourt points out. “Now those voices are amplified twenty-fold, and a lot more people have witnessed, front and center, the impact of disparities in ways they never comprehended.”

“I have spent most of my career talking about the cost and quality-and-safety value case for addressing disparities,” Betancourt says. “This is the first time I can actually lead with why these things are important from a social justice and equity standpoint.”

Even so, he says, there is no denying that from a cost and quality-of-care standpoint, not integrating health equity work into the fabric of an institution and into the community comes at everyone’s collective peril. “Leaders who may have considered this before but not invested in it or leaders who felt it was important to address but who nibbled around the edges — these groups may now have the courage for bigger, bolder, more comprehensive things,” Betancourt hopes.

There is also a real opportunity for rising radiologists to move the needle on health equity. It will still require resources, leadership, and accountability, he says. “But every generation seems to be more active than the last — understanding what is happening in a deeper way,” Betancourt says. “It is critical to leverage those voices right now. It is already starting to happen, and it is energizing.”

### Leadership Matters

Listening and acting based on what continues to unfold around the pandemic is incumbent on radiology leaders who are building teams that will best serve all patients. “I think it means a lot to communicate authentically with your patients. That’s what having a diverse staff is about,” Goldberg-Stein says.

“If we survive a pandemic but ignore the things that have surrounded it — the other social injustices and inequities of care — we haven’t really conquered the problem or shown strong leadership,” Goldberg-Stein says. “Number one, we’re all in this together. But number two, leadership matters.” When you model the right behavior, when you say the right things, it can have a very powerful and profound effect on the people who are listening, she says.

There is no question that URMs were hit harder than other populations when the pandemic broke. “A virus doesn’t discriminate between zip codes,” Goldberg-Stein says. “We really need to get away from this concept that one group or one portion of the population is more important or deserving than the other. A lot of patients have suffered through COVID-19 — young, old, privileged, and not. We’re all interconnected — all of humanity is connected.”

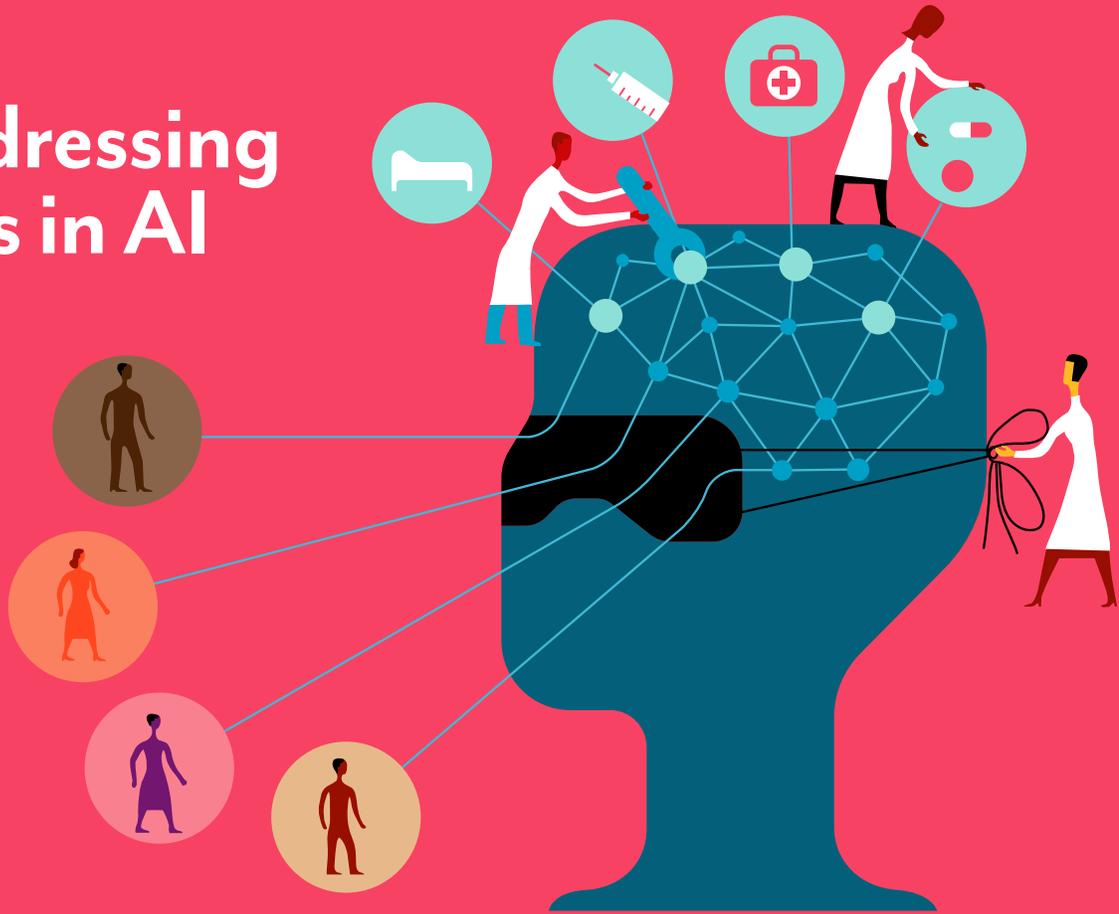
“Before, during, and after COVID-19, we need to be closely focused on patient access — care for all our patients,” Goldberg-Stein says. “If you understand that everyone matters, and you understand your community, you can accomplish quite a lot.” **B**

By Chad Hudnall, senior writer, ACR Press

### ENDNOTE

1. Betancourt JR, Tan-McGory A, Flores E, Lopez D. Racial and ethnic disparities in radiology: a call to action. *J Am Coll Radiol*. 2019;16(4):547-553.

# Addressing Bias in AI



## A culture of fairness ensures protection for vulnerable or underrepresented populations.

Radiologists, machine learning scientists, industry experts, and policymakers are increasingly confronted with ethical considerations related to the development and implementation of AI tools in healthcare. Among these ethical challenges is the imperative to identify and mitigate sources of unwanted bias that may be reflected in AI algorithms. Here are a few relevant points to consider when striving to create and use fair AI algorithms for clinical practice.

### Can AI algorithms be biased?

The presence of human biases, both conscious and unconscious, is well known. Similarly, if care is not taken, AI algorithms can explicitly and implicitly encode those same biases. When AI models identify statistical patterns in human-generated training data, it is no surprise that our biases can be reflected in these algorithms. If these biases go undetected before AI tools are implemented in clinical practice, they can lead to harmful results. Therefore, recognizing potential sources of bias in AI algorithms is critical to ensuring their safe use.

### How do biases make their way into AI algorithms?

Unwanted bias may be incorporated unwittingly into AI models at points throughout an algorithm's lifecycle — including the creation of training datasets, selection of model architecture, and refinement of the algorithm post-deployment. While the potential to introduce significant biases exists in each of these phases, I will focus primarily on examples of bias affecting the training data.

Data points used to train AI algorithms are drawn from the results of human decisions. Therefore, these algorithms may reflect the effects of historical or systemic inequities. An article published in *Science* last year illustrated how an AI algorithm used in population health management reflected systemic inequities embedded in the delivery of care — and showed the resulting unfair results.<sup>1</sup> The algorithm in the study used healthcare costs as a proxy for disease complexity — making the assumption that patients with the highest healthcare expenditures would benefit most from certain interventions. However, due to unequal access to care between white and Black patients, the healthcare costs for Black patients are lower than those of white patients with similar disease complexities. Therefore, using this algorithm's output to guide treatment decisions, Black patients would receive comparatively less care — reinforcing existing inequities.

Underrepresentation of a given sub-population in the training data is another potential source of bias — and is particularly relevant to healthcare. When it comes to training an AI algorithm, fewer

data points may lead to less accurate predictions. If not explicitly accounted for, the routines used to train machine learning models will often optimize over the entire population — resulting in unequal impacts from majority and minority sub-populations. Therefore, the model's performance on underserved patients, who have historically faced greater challenges accessing care, including imaging, may be silently deprioritized if corrective measures are not taken — resulting in lesser performance relative to the general population.

### What are some strategies to mitigate algorithmic bias?

Before we can effectively assess AI algorithms for potential bias, we should strive for a better understanding of the factors that lead a model to reach a certain output. We also need to agree upon measurable and relevant fairness metrics. Both of these goals are not without their own challenges, including the black-box nature of AI models and the existence of multiple competing definitions of fairness. As ongoing work is done to address these tasks, we can begin establishing practices to identify and mitigate bias. These include:

- Processing the data to address biases before moving forward with training
- Embedding techniques to ensure fairness is built into the model development process
- Assessing the algorithm's outputs for bias and fairness before operationalizing by validating against a diverse data set from multiple institutions and geographic locales prior to use in clinical practice
- Monitoring algorithms after deployment to ensure they function as expected in actual clinical practices with heterogeneous imaging equipment and patient populations

Just as radiologists perform quality assurance on all our imaging modalities, we should aim to incorporate bias evaluation in routine and ongoing assessment of AI algorithms. A culture of AI fairness should ensure that vulnerable or under-represented populations remain adequately protected. Our ability to provide the best possible care to patients depends on it. **B**

By Monica J. Wood, MD, member of the ACR DSI AI Advisory Group and chief neuroradiology fellow at Massachusetts General Hospital in Boston

#### ENDNOTE

1. Obermeyer Z, Powers B, Vogeli C, Mullainathan S. Dissecting racial bias in an algorithm used to manage the health of populations. *Science*. 2019;366(6464):447–453.

### Building Fair and Equitable AI Applications as a Community

Bias and fairness in AI are challenging and complex topics. Ongoing discussion and work are needed to ensure the applications we develop and use reflect the high ethical standards we uphold in medicine. As radiologists, we must:

- Pledge to diversifying AI talent in healthcare: A diverse team is more likely to uncover blind spots and lead to decisions that are more inclusive.
- Stay informed: Fairness, accountability, and transparency in machine learning is a developing area of research, with a growing list of resources. A selection can be found at [bit.ly/relevant-scholarship](https://bit.ly/relevant-scholarship).
- Engage in meaningful conversations: When designing and evaluating algorithms, being explicit about their objectives and trade-offs is more likely to ensure issues like bias and fairness remain front and center.

## Breaking Down Barriers

*continued from page 11*

patients receiving the screening for which they are eligible, such as reminder systems built into the EMR. However, I realize that this might not be an immediate step, nor is it the easiest thing to implement first. On your way to reaching this goal, you have to demonstrate your excellence as a program and your willingness to take ownership of the patients you screen — as well as your willingness to be a part of a multidisciplinary team.

At UCLA, we do this by promoting screening as a comprehensive program and facilitating the shared decision-making process. We take responsibility for maintaining a screening database and ensure that patients come back on time and are aware of their annual screenings. We hold multidisciplinary conferences and go to primary care offices to offer journal clubs, lunchtime lectures, and Grand Rounds to make sure that everyone is aware of the intricacies and health benefits of LCS.

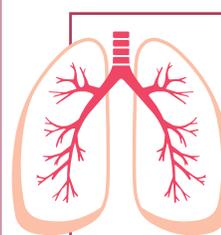
### How can radiologists develop interventions to address the stigma and implicit bias many patients experience when they come in for LCS?

LDCT is different from other imaging screenings because we are screening former and current smokers, who often face barriers to screening such as stigma and shame for smoking or having previously smoked. It's important to realize that these patients may feel vulnerable and judged. We have to make sure that patients understand why we're there — to provide resources and save lives. We are not interested in passing judgment. Making sure that message comes across, being aware of potential psychological barriers to screening, and working to mitigate them are critically important. **B**

Interview by Meghan Edwards, freelance writer, ACR Press

#### ENDNOTES

Full list of references available in the digital edition at [ACR.org/Bulletin](https://acr.org/Bulletin).



The LCS Steering Committee and ACR staff have created the Resumption of Screening toolkit, a dedicated resource to assist LCS centers with return to screening during the pandemic. Access the toolkit at [acr.org/lcs](https://acr.org/lcs).

# Creating Lasting Improvements

With racism and health inequity in the national spotlight, some are asking: How can we bring about long-term change from crisis?

For many, COVID-19 has exposed deep cracks in the U.S. healthcare system — for others, these cracks have been evident all along, but the combination of the pandemic and the death of George Floyd provided the perfect storm to bring these weaknesses to the fore. “COVID-19 revealed the rampant effects of racism on medicine,” says Daniel B. Chonde, MD, PhD, resident physician and co-chair of the department of radiology, diversity, and inclusion’s committee on education at Massachusetts General Hospital (MGH). Rather than bury our heads, though, now is the time to harness that attention and energy — and turn it into progress, Chonde says. “This is one of those times where you could be doomscrolling or you could do something about it,” he says.

Elyse R. Park, PhD, clinical associate in psychology at MGH and director of behavioral research for the MGH Tobacco Research and Treatment Center, the Benson-Henry Institute for Mind Body Medicine, and the MGH Cancer Survivorship Program, agrees. “I think the advocacy around healthcare access for vulnerable populations has really raised people’s awareness,” she says. “Those together really influence people’s awareness of health disparities at all institutional levels.”

So now that we see it, what can we do? Part of the answer lies in outreach, according to Chonde and Park, to communities and to medical students. According to Park, as the country settles in for the next wave of the pandemic, a key area in which institutions can start beefing up their efforts to combat inequities in healthcare — community outreach. “A longstanding issue with clinical research is that racial and ethnic minority populations have historically low enrollment rates in clinical trials,” she says. “That creates a cascading effect — all of that research does not represent these groups in terms of conclusions, but also long-term access to care. We have been trying to create policies to allow us to do more community-based outreach to vulnerable populations, which we had not been able to get any traction on before.”

But, she says, there is tension between privacy issues and community outreach, and the right balance needs to be struck. “This is very basic but sometimes people have to consent before we do outreach, but we want to do outreach prior to consent,” Park says. “For example, in our current study, Screen Assist, we send patients information about a study that provides free tobacco treatment support for patients undergoing lung cancer screening (LCS). We have created a video that features a physician who emphasizes the importance of quitting smoking and getting LCS. Yet, we have to respect patients’ privacy and not reveal that they are eligible for LCS. Unless we’re allowed to move forward and do more direct outreach into these vulnerable populations, we can’t accomplish what our research is intended to.”

Community outreach is especially important now, Park says, because with a second COVID-19 surge looming and no end in sight, there is growing concern amongst researchers that trends observed over the last few months will only worsen. “Folks in vulnerable populations were disproportionately affected, and unfortunately there’s a lot of concern about this trend continuing when there’s a vaccine,” she says. “There’s also a growing concern that existing disparities in cancer screening are going to widen — that URM’s are going to be more hesitant and slower to return to preventive care because their communities have been disproportionately affected by COVID-19 and they want to limit their in-person exposure, which includes going to a hospital/clinic for screening. Racial and ethnic minorities already have later diagnoses traditionally, so then that just amplifies the cycle.”

“COVID-19 REVEALED THE RAMPANT EFFECTS OF RACISM ON MEDICINE.”

— Daniel B. Chonde, MD, PhD

Park notes that it’s important that radiologists advocate for remote treatment visits to the extent that they can, understanding the logistical challenges and particularly financial challenges of the populations that have been really hard-hit by COVID-19. “Try to think creatively about how you can reach out to patients in safe ways — promoting remote communication so that they don’t have to keep coming in to the hospital,” Park says.

Longer-term, really homing in on efforts to increase diversity in the field will be key, says Chonde. “Our job as radiologists is to be a place where any medical student feels safe. We should be soliciting diverse populations to choose radiology.” All in all, Chonde is optimistic. “With each of these crises, we’re able to make incremental steps,” he says. “My hope is that we’re able to capitalize on one of these events to ignite some lasting effects.” **B**

By Cary Coryell, publications specialist, ACR Press

## Health Equity and Radiology

Leaders in the Commission on Patient- and Family-Centered Care’s Population Health Management Committee are delivering an upcoming webinar on health equity and radiology. Designed to provide radiologists with insight on how they can take action to ensure quality care for all members of their communities, presenters will include health system equity and inclusion leaders and patient advocates. Experts will describe how overcoming racial, socioeconomic, and geographical barriers supports high-quality imaging care and vibrant practices. For more information and to register, visit [acr.org/imaging3](https://acr.org/imaging3).

# Responding to Racial Inequity

**As protests against racial injustice continue across the U.S., the ACR is speaking out and moving forward with change.**

**O**n June 1, the ACR was among the first healthcare organizations to weigh in on the racial injustice in the country, issuing the following statement:

*“In recent weeks, our nation has again suffered a series of events which illuminate the disparities of our healthcare system and our society in general. Healthcare and economic disparities account for vastly disproportionate disease and death rates among African Americans, once-again magnified during the COVID-19 pandemic (see page 8 of the special section on health equity). As a professional medical organization, the ACR recognizes these events as tragedies not only for our population, patients, and frontline colleagues, but for our profession and nation, that must be addressed. As Dr. Martin Luther King Jr., noted in 1963, ‘Of all the forms of inequality, injustice in healthcare is the most shocking and inhumane.’ We support the victims of senseless violence while we work to increase diversity, inclusion and access to care in our field of radiology. While recent events have been tragic, and even shocking, we still have the opportunity to address inequity in healthcare and social justice disparity in America in ways that preserve the safety and dignity of all involved. We look forward to working with other medical providers, affected communities, lawmakers, government agencies, and other stakeholders to address such inequities and effect positive change together.”*

In response to the ACR statement, Melissa A. Davis, MD, MBA, assistant professor of radiology and biomedical imaging at Yale University, wrote the following on ACR Engage:

*“I applaud the ACR for taking a stance on the systemic disenfranchisement of the black community. It is a step in the right direction and in line with the multitude of healthcare organizations starting to speak out on what is a public health crisis. While these events are tragic, they are not shocking. I am not shocked because this is not the first time, and frankly I don’t expect it to be the last. I am tired. I am exhausted. I am dismayed. I am sad. I am angry. I am scared, but not shocked.*

*Why? Because black people live under chronic stress which is directly related to rampant underlying chronic illness. Because black women are 2.5 times more likely to die in childbirth when compared to white women — regardless*

*of socioeconomic status. Because as a physician I have an obligation to leverage my voice and help those in need.*

*This is not a black problem. This is an American problem. This hurts all of us, even if you don’t feel it as acutely as I do. This cannot even begin to be solved until those with power leverage it to help a community whose necks are crushed under the knee of aggressive, unnecessary, authority — literally and figuratively. The ACR can be an ally.”*

Fostering diversity and inclusion in the radiological sciences is a priority for the ACR. The College’s goal is to introduce medical students to the field early — particularly those from backgrounds underrepresented in the specialty, who might not otherwise be informed about or consider radiology or radiation oncology. The pages of this issue of the *Bulletin* highlight the many ways in which radiology is moving the needle forward on diversity and inclusion. Ashley Prosper, MD, a radiologist at Ronald Reagan UCLA Medical Center, is using an ACR Innovation Fund grant to assess lung cancer screening in minority populations. Massachusetts General Hospital has launched a system-wide effort to ensure that patients, providers, and employees are treated equitably and have access to necessary information during the COVID-19 pandemic. Creating a state chapter committee on diversity and inclusion can provide a critical opportunity for members to locally embrace and actualize the ACR mission of “excellence through diversity via enhanced member engagement, problem-solving and innovation, and mentorship.”

Promoting diversity and inclusion positions our profession to meet the needs of an evolving and increasingly diverse patient population. The College hopes to inspire you to take the next step to achieving health equity in your community. **B**

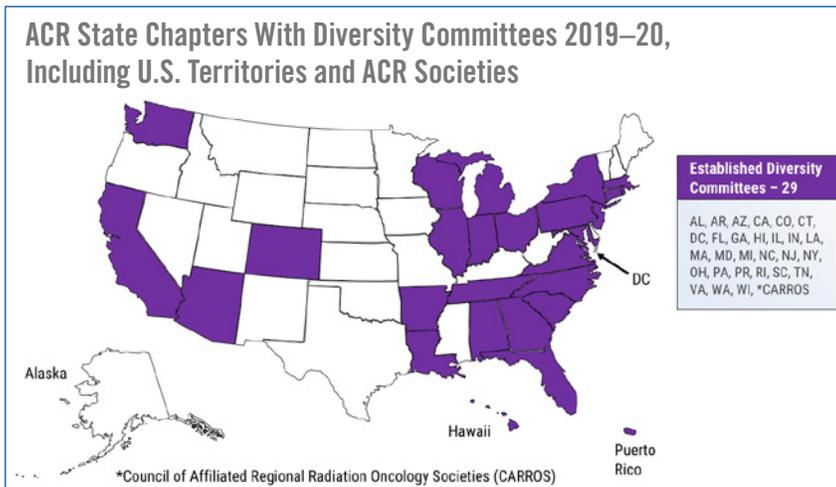


Read an opinion piece on social justice by Roderic I. Pettigrew, MD, PhD, a radiologist and recipient of the 2019 Arthur M. Bueche Award, in the Association of American Medical Colleges’ INSIGHTS publication at [bit.ly/AAMC\\_Pettigrew](https://bit.ly/AAMC_Pettigrew).

## Fostering the Future of Radiology

The ACR Commission for Women and Diversity founded the Pipeline Initiative for Enrichment of Radiology (PIER) mentoring program in 2016 to increase minority and women medical student exposure to and preparation for radiology postgraduate training. In 2019, ACR decided to bring the program in-house, and now manages PIER as an internal ACR program, leveraging all the College’s extensive educational resources and experience. Over 30 applications were received for the summer 2020 radiology internship program — more than the previous three years combined. COVID-19 resulted in unanticipated institutional restrictions, including eliminating many in-person internship programs for medical students, but ACR staff and the PIER Steering Committee transformed the program into a virtual format so that the learning could continue. For more information, [visit \*\*acr.org/PIER\*\*](https://www.acr.org/PIER).

# Trailblazing a Path to Diversity



**Creating a diversity committee provides a critical opportunity for a state chapter to embrace and actualize the College’s mission of “excellence through diversity.”**

## How to Create an ACR State Chapter Committee on Diversity:

1. Commit to the value of diversity and inclusion
2. Engage chapter leadership
3. Engage membership
4. Engage the community

Learn more in the ACR reference guide, “How to Create a Committee on Diversity in Your ACR State Chapter,” at [acr.org/Create-a-Committee](http://acr.org/Create-a-Committee).

Fostering diversity in the radiological sciences is a priority for the ACR. In 2012, the College established the Commission for Women and Diversity as an Association of American Medical Colleges Diversity 3.0 initiative. The 2014 ACR Strategic Plan set a goal to “increase diversity and inclusion in the radiological professions.” The Commission crafted a corresponding strategic plan, elaborating a vision “to achieve a profession that celebrates diversity and actively promotes inclusion at all levels of training, practice, and leadership.”

Creating a state chapter committee on women, diversity, and inclusion provides a critical opportunity for a chapter to locally embrace and actualize the ACR’s mission of “excellence through diversity.” Many chapters have enthusiastically championed the creation of such committees as the momentum around inclusion grows nationally. As of 2019, at least 34 states/organizations have created, or are in the process of creating, a diversity committee (see graphic).

In 2015, the first state chapter committee on women and diversity was established by the Washington State Radiological Society (WSRS). This ad hoc committee included members of the chapter leadership, active members in academics and private practice, and

members-in-training. The group was approved as a standing committee in the fall of 2016. The WSRS committee’s inaugural chair, Gail N. Morgan, MD, FACR, was then tasked by the commission with authoring a blueprint to assist other chapters, from which she created the ACR reference guide, “How to Create a Committee on Diversity in Your ACR State Chapter” (see sidebar).

State diversity committees can identify, encourage, mentor, and support young underrepresented minorities (URMs) and female radiologists to take on leadership roles in their state chapters — creating a pathway to contributions and leadership in ACR nationally. Chapter leaders become Councilors, members of ACR committees and commissions, and ascend to elected positions on the College Nominating Committee, CSC, and other leadership positions. As a seminal example of how involvement in state chapters can be a catalyst for ACR leadership at the state and national levels, Morgan, who currently serves as chair of the Committee for Diversity and Inclusion on the Commission for Women and Diversity, made leadership contributions at the state and national levels — including as a former president of the WSRS. As an example of “paying it forward,” with Morgan’s support and mentorship, Rachel F. Gerson, MD, got involved at the state level as a member of the diversity committee. She has subsequently become its committee chair and was recently elected to the ACR CSC.

Encouraging a diverse array of medical students to choose the radiological sciences is vital to the future of our profession. However, there are several barriers to overcome. The first barrier is “a limited entry into the medical school pipeline which reduces the downstream pool of URMs” as future physicians.<sup>4</sup> The second barrier is the lack of URMs and female representation specifically in radiology and radiation oncology, in comparison with other medical specialties — known as a “specialty disparity.”<sup>1,2,3</sup> Specialties like family medicine and OB-GYN, for example, have shown the highest change in URM representation — increasing by 3.6% between 1990 and 2012. Radiation oncology shows the least increase in representation, going up only 0.8% for the same time period.<sup>2</sup>

Radiology is similar; from 2003 through 2011, URM and female trainee representation remained virtually unchanged.<sup>1</sup> Diagnostic radiology is the ninth largest medical specialty in the U.S. — however, it ranks 20th and 17th for URM and female representation, respectively.<sup>1</sup> This limited pipeline can be self-sustaining, with lack of representation reducing our ability to recruit diversity

*continued on page 21*

# Keeping the Conversation Going

A civil rights activist encourages continued dialogue as radiology addresses its lack of underrepresented minority physicians.

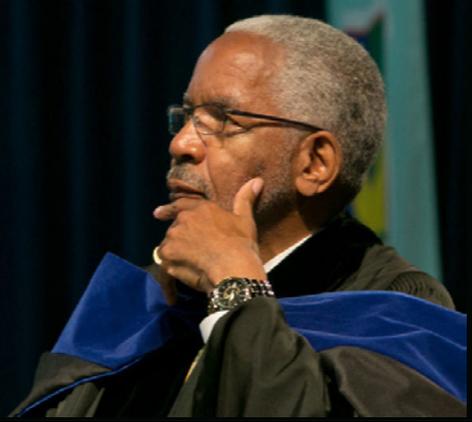


PHOTO: NICK GOULD

**A**s the U.S. reckons with its racial inequality of the past and present, the ACR is exploring how it can leverage its own advocacy network to create a future of healthcare equity. The *Bulletin* talked with Henry W. Wiggins Jr., MD, a Black radiologist and civil rights activist, about his early experiences in the profession.

## How did you get your start in radiology?

I remember being a high school senior in Clearfield, Pennsylvania, in 1951, when my entire class got to go to Washington, D.C., but I couldn't go because restaurants and hotels in Washington D.C., at that time, refused to serve Black Americans. I was the only Black intern at University Hospital, Iowa City, from 1959–1960. I was an internal medicine resident from 1960–1961 and a radiology resident from 1961–1964. When I was at Michael Reese Hospital in Chicago from 1964–1966, I was the only Black radiologist on staff.

I was drafted into the U.S. Navy and relocated with my family to serve at the San Diego Naval hospital as Lieutenant Commander during the Vietnam War from 1966–1968. During the first few months, I made several calls to look at available housing — only to be told that nothing was available when I showed up in person. This obvious racism affected my ability to do my job and the well-being of my family.

Later, I was transferred to Bremerton Naval Hospital in Washington. When I arrived at the hospital for the first time, I was mistaken for Dr. Bryant, the other Black physician on staff, which was bittersweet. On the one hand, it was disheartening to be mistaken for another Black doctor. On the other hand, I was glad that for once I wasn't going to be the only one on staff.

**In your 1965 Postscript essay, “Freedom: Spirit of the Selma March,” you wrote about your participation in the march from Selma to Montgomery. How did this experience change you?**

Being around other people who were doing the same

thing, for the same reasons I was, ignited a new chapter in my life. There weren't only Black folks there — there were people of all races, from all over the country. I discovered that the reasons I was marching were relevant and important to a broad spectrum of people — not just to me and my community. That's why I also participated in the Million Man March in Washington, D.C., in 1995.

## How do racial disparities in healthcare continue to be a public health crisis for Black communities?

There is a shortage of Black physicians. For Black families, this may mean that they can't see a physician they feel comfortable with or who understands their culture. But disparities in healthcare don't just affect Black communities. They affect Native Americans, Latinxs/Hispanics, people from different socioeconomic groups — everyone who lacks representation in the profession.

## Why do you think radiology lags behind other medical specialties in its percentage of Black physicians?

Medicine in general lacks representation of Black physicians, not just the field of radiology. And one can't talk about this without considering the effects of the Flexner Report of 1910, a landmark study of medical education in the U.S. and Canada.

The medical school closures that occurred as a result of this report disproportionately affected schools at Historically Black Colleges and Universities (HBCUs). Of the seven medical schools at HBCUs, five were closed. Because of widespread admissions discrimination at the time, it was almost impossible for aspiring Black medical students to study anywhere else.

During the '50s and '60s, plenty of Black students applied at all medical schools, not just the ones at HBCUs. They just weren't being accepted. It became

Henry W. Wiggins Jr., MD, is pictured at the Franklin and Marshall College Convocation ceremony for the Class of 2017.

*continued on page 21*

Richard Duszak Jr., MD, FACR, Speaker, and  
Amy L. Kotsenas, MD, FACR, Vice Speaker

# The Six-Week Miracle

**ACR 2020 was a departure from previous annual meetings — but more than 700 members convened virtually to move forward with the business of the College.**

**2020** has been, and continues to be, a challenging year. As the COVID-19 pandemic arrived in the U.S. this past spring, the CSC made the dauntless decision to hold ACR 2020 virtually, rather than canceling it altogether.

The ACR is a representative membership organization, and our annual meeting is first and foremost a business meeting — with specific activities stipulated in our bylaws. With only six weeks to plan the shift to a virtual format, we chose an approach that focused on the governance activities necessary to ensure the continuity of our organization's leadership and policy development. We condensed the meeting program to prioritize the ACR elections and the consideration of policy resolutions, bylaws amendments, and Practice Parameters and Technical Standards.

In transitioning to the virtual meeting format, we expected it might be difficult for attendees to remain attentive and engaged in front of a screen for an extended length of time. For this reason, programming that had previously been included as part of our annual meeting — such as the always-popular Economics Forum, the Open Microphone session, the Moreton lecture, RFS and YPS programs, CME content, and the Chapter Leaders' Workshop — were all deferred. We are considering alternative ways to offer this content throughout the year and we will notify you as soon as decisions are made. One such CME program, "Brave New Work: How to Get Ahead and Meet Leadership Challenges in 2020 and Beyond" — presented by the Radiology Leadership Institute® and ACR's Commission on Publications and Lifelong Learning — was hosted as a webinar in June and is available for viewing online at [acr.org/Brave-New-Work](https://acr.org/Brave-New-Work). Pre-recorded reports, including messages from the Task Force on Certification in Radiology and the Task Force on Open Communication, are available for review at [acr.org/annual-meeting](https://acr.org/annual-meeting).

The Convocation was live-streamed on YouTube so that fellows, honorees, their family members, and their

colleagues could participate. The pre-recorded presidential address by Debra L. Monticciolo, MD, FACR, was played during the meeting and can also be viewed online at [acr.org/annual-meeting](https://acr.org/annual-meeting).

With several potentially contentious policy resolutions and a few late ones on our slate this year, we extended time for critical issues like voting and the Reference Committee open hearings, which took place over two days instead of the usual single morning. In planning these sessions, we tried to keep things as simple as possible. For example, we allowed election candidates to pre-record their speeches so that we did not need to choreograph numerous handoffs of the virtual microphone with all the possible complications that live speeches can generate (e.g., "Sorry, I was on mute!"). To ensure fairness in the process, all candidates were provided with instructions for recording the videos without using professional resources, using a standard format, and adhering to the usual two-minute limit. We also made the speeches available one week ahead of the meeting so that everyone could watch them in advance and be prepared to vote as soon as the polls opened. The same process was followed for the RFS and YPS elections.

Planning this first-ever virtual annual meeting was a team effort. We appreciated everyone's patience with myriad technical glitches, both major and minor. We are grateful to our ACR governance and IT staff teams, as well as staff from across the organization, who came together, often on a daily basis, to ensure the success of our meeting. We are also grateful to our councilors, alternate councilors, chapter leaders, and attendees for their patience and enthusiastic participation in making this meeting a success.

This is not to say we didn't miss being with you all in-person to enjoy the networking opportunities that live meetings afford us. We hope that circumstances in the world will shift and allow for an in-person meeting in Washington, D.C., in 2021. At the same time, we recognize that several aspects of the virtual meeting could be carried forward. We have received feedback that approximately 12% of this year's attendees were able to participate *only* because of the virtual format. The virtual format also provided a unique opportunity for new voices to participate in caucuses and open hearings. The Convocation could potentially be live-streamed every year to allow family members who cannot travel to celebrate with new fellows remotely. Perhaps it is time to move forward with pre-recording of candidate speeches to preserve time during the meeting. As we imagine a future hybrid approach, the possibilities are truly endless. **B**

## Trailblazing a Path to Diversity

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into our workforce. Therefore, intentional intervention to introduce our profession to high school, college, and early medical school students is key to future recruitment of diverse talent.

Diversity committees can coordinate outreach opportunities to these students and identify physician mentors at a statewide level. These activities dovetail with ACR's efforts to prioritize early exposure to the radiological sciences through the Pipeline Initiative for Enrichment of Radiology mentoring program, which provides a sponsored summer research internship for first-year URM medical students. Creating a chapter committee allows for increased opportunities to enhance member engagement, foster problem-solving and innovation, and recruit and empower new members. Promoting diversity and inclusion positions our profession to meet the needs of an evolving and increasingly diverse population. **B**

By Leah K. Sieck, MD, Allan B. Chiunda, MD, PhD, MPH, Lori A. Deitte, MD, FACR, Andrea A. Birch, MD, FACR, Lucy B. Spalluto, MD, MPH, and Gail N. Morgan, MD, FACR, members of the ACR Commission for Women and Diversity

### ENDNOTES

Full list of references available in the digital edition at [ACR.org/Bulletin](http://ACR.org/Bulletin).

## Keeping the Conversation Going

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commonly known in the community that we weren't being accepted elsewhere. Looking back, I knew very few Black physicians who studied at other medical schools. The resulting shortage of Black physicians continues today and extends to radiology.

### Although the overall number of Black male college graduates has increased, the number of Black male medical students has actually decreased since 1978. Why do you think this is?

I think there are a lot of factors involved in decreased enrollment. Cost is one of them. Lack of representation in medicine is another, because many college students won't choose to study something in which they don't see themselves represented.

The National Medical Association (NMA) was created in 1895 to serve Black physicians who were not permitted to join the AMA at that time. I used to do recruitment tours on behalf of the NMA to help spark interest in a medical career among students of color.

I also used to host the NMA section at RSNA, with Black radiologists, residents, and medical students in attendance. That proved to be a good venue for recruiting

Black medical students into radiology.

Targeted radiology internships and mentorship programs are also a way to attract more URM physicians to radiology. It may be beneficial to expose students of color to careers in medicine at an even earlier age — in high school or middle school.

### How might the radiology community address and eliminate implicit bias?

Implicit bias needs to be discussed more often — in our CME, at our conferences — to the point where everyone is aware of their own biases. We all have them.

Medical students need training, and early, about what implicit bias is, how to recognize and challenge their own biases, and how to ensure those biases don't spill over into their practices. In patient care situations, this is critical, and sometimes it is literally a matter of life or death. While I don't have concrete solutions for inclusion, what I do know is that we as a profession have to talk about it. Hopefully, conversation will lead to action that improves health equity and representation within our field, to the benefit of the patients we serve. **B**

Interview by Laura Sirtanski, freelance writer, ACR Press

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# How can we take actionable steps to achieve health equity for the people in our communities?



**“Health equity can only be achieved through active introspection with personal and institutional commitments at every step of medical training and beyond. New trainees need to be exposed, challenged, and involved – with research and activities designed to expose the reality that access to radiological services is distributed inequitably. Institutions could partner with ride-hailing companies to provide transportation, establish fair, reasonable, and clear payment plans, and provide culturally sensitive educational materials in their patients’ native languages. These are just a few examples that could have profound effects, as multiple studies have shown.”**

– Miguel A. Peña, MD, candidate for the master’s degree in public policy at Harvard Kennedy School in Cambridge, Mass.



**“When I was in preschool, the Americans with Disabilities Act came out – and that gave the deaf community access to education. If you have complete hearing loss, you can imagine how difficult it is to learn how to read if you don’t have an interpreter or assistance. I can’t tell you how powerful it is for me to see deaf people going from living on welfare to being fully functional leaders of the community, in a single generation, just because we were provided access to education. So if anyone ever needs evidence that to achieve health equity it’s not just about education but about access to education, just look at the deaf population. It makes a world of difference.”**

– Johnathon D. Stephens, MD, radiology resident at the University of Illinois

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To contact a member of the *ACR Bulletin* staff, email [bulletin@acr.org](mailto:bulletin@acr.org).

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