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Welcome

The need to positively impact health equity in radiology has never been greater.

While healthcare disparities have been with us for many years, the COVID-19 pandemic has magnified the disproportionate numbers of minorities and rural residents in the U.S. affected by barriers to care.

The inequities in radiologic care are staggering.

According to recent research published in the Journal of the American College of Radiology, 72% of racial and ethnic minority patients are not able to obtain the diagnostic imaging they need.¹

We’re committed to act.

Eight major radiology organizations have come together to form the Radiology Health Equity Coalition. Our vision: to positively impact healthcare equity in the radiology arena and beyond.

Now.

This Community Outreach Guide shares actionable tools and resources to empower radiology professionals to drive improved outcomes for those impacted by healthcare disparities.

Get Started

¹Patient Race or Ethnicity and the Use of Diagnostic Imaging: A Systematic Review; Colwell, Narayan, Ross; February 22, 2022DOI: https://doi.org/10.1016/j.jacr.2022.01.008

Robert S. Pyatt Jr., MD, FACR
Chair of the American College of Radiology® (ACR®) Commission on General, Small, Emergency and/or Rural Practice

Member, Radiology Health Equity Coalition Workgroup on Community Health Outreach
Introduction to Community Health Outreach

Many individuals don’t have access to the healthcare they need — and the gap is widening for those in disadvantaged communities. The COVID-19 pandemic magnified the disproportionate numbers of minorities and rural residents in the U.S. affected by barriers to care.

We are coming together to do something about it.
If we work together to connect people with the health resources they need, we can help residents take control of their health and improve the well-being of our entire community.

That’s what community health outreach is all about. And it’s especially critical for those impacted by regional, racial and economic-related healthcare disparities.

Radiologists have a critical role to play in closing the gaps.
Medical imaging impacts most patients at some point in their care journey. So, our specialty has the unique potential to be a unifying change agent across an inequitable healthcare system.

Radiologists can and should play a leadership role in ensuring high-quality imaging care for all people, in screening, diagnosis, treatment planning and monitoring, and image-guided and interventional radiology treatments.

“The ACR, RSNA and our fellow coalition members recognize that radiologists are uniquely positioned to help eliminate disparities in healthcare, because medical imaging touches most patients at some point. Our consultative role across the care process, and particularly in medical education, creates an opportunity to drive systemic change to achieve consistent, high-quality and equitable care for all.”

Jinel A. Scott, MD, MBA
Radiological Society of North America (RSNA) Member Representative to the Radiology Health Equity Coalition
Disparities in Medical Imaging Access

Life expectancy is three years shorter, and heart disease, cancer and stroke death rates are significantly higher in rural areas than metropolitan areas.²

About 60 million people — or 20% of all individuals — live in rural areas, where they face unique access-to-care issues, such as lack of primary care doctors and specialists, lack of transportation and long drives to doctor’s offices.³

22% of those in rural areas live within 30 minutes of a lung cancer screening center vs. 83% in urban areas.⁴

²https://www.ruralhealthinfo.org/topics/rural-health-disparities#causes
72% of racial and ethnic minority patients are not able to obtain the diagnostic imaging they need.\(^5\)

White patients received imaging during 51.3% of their emergency room visits, whereas black patients received imaging only 43.6% of the time.\(^6\)

39% of U.S. women without health insurance had a mammogram in the past two years vs. 75% of those with health insurance.\(^7\)

\(^5\) Patient Race or Ethnicity and the Use of Diagnostic Imaging: A Systematic Review; Colwell, Narayan, Ross; February 22, 2022DOI: https://doi.org/10.1016/j.jacr.2022.01.008


Hispanic women are 40% more likely to be diagnosed with cervical cancer, and 20% more likely to die from it compared to non-Hispanic white women.⁸

Black women are 42% more likely to die from breast cancer than white women.⁹

Black men are 52% more likely to die from colorectal cancer than white men.⁹

Black Americans with diabetes are three times more likely to have a limb amputated than others.¹⁰

Asian Americans are twice as likely to die from stomach cancers, eight times more likely to die from hepatitis and have a tuberculosis rate more than 30 times higher than white Americans.¹¹
Making an Impact With Clinical Trials

One approach for improving health equity is to ensure that clinical research is more inclusive. It is well documented that making clinical trials more accessible to marginalized groups results in improved health outcomes for medically under-resourced populations.

**TMIST Trial Minority Recruitment: A Health Equity Step Forward**

Among the fastest growing National Cancer Institute (NCI)-sponsored trials of the COVID-19 era, the Tomosynthesis Mammographic Imaging Screening Trial (TMIST) is more than halfway to its recruiting goal of 128,905 participants. Yet, more sites and participants are needed.

Among the more successful large clinical trials ever at attracting Black participants, more than 20% of U.S. women in the study are Black. This growing rate is far higher than the average Black cohort in NCI-funded trials (9%).

TMIST is the first randomized trial to study whether digital breast tomosynthesis (DBT) may outperform (2D) digital mammography in reducing advanced breast cancers — those more likely to kill women. The study is also creating the world’s largest curated dataset of breast cancer screening clinical data, images and biospecimens to help researchers tailor future screening to a woman’s individual risk. TMIST pays for mammography screening for women who qualify for charity care at a participating site, enabling screening of more women from underserved groups and areas.

Practices with tomosynthesis and digital mammography interested in taking part in TMIST should visit acr.org/TMIST, read this card, watch this video and contact TMIST staff at tmist@acr.org.
Resources to Address Barriers to Equitable Care

What Radiologists Need to Know

- Language proficiency
- Cultural beliefs and experiences
- Delayed follow-up care on abnormal findings
- Health literacy

When applicable, use language assistance services to ensure that communication between patient and provider is clear and effective.

Partnership with Community Health Workers/Promotoras is a successful approach to reaching low-income and vulnerable communities.

When communicating with patients, use language that is simple and straightforward. Avoid using medical words when speaking to a patient.

Resources
- AMIGAS Program
- Promotora/Community Health Workers Resources
- Radiology Resources for Patients
- Think Cultural Health—How to Provide Culturally and Linguistically Appropriate Services
- Think Cultural Health—RESPECT Model
Health Equity: A Collaborative Aim

Partnerships are strategically vital for radiology organizations to embrace as they work towards expanding medical imaging access to underserved populations. Since medical imaging touches all areas of healthcare delivery, it makes sense that radiology plays a critical role in creating an equitable healthcare environment for all patients.

Partnering with a community health organization can be a mutually beneficial relationship for the radiologist, community health entity, and most importantly, patients. Agreeing to partner with an organization is not difficult, however, developing a sustainable collaborative relationship requires forethought, communication and transparency. Understanding the purpose of a strategic alliance is a critical preliminary step.

A partnership with a community health organization:

- Mobilizes expertise, resources and core strengths to enhance quality care for underserved patient populations.
- Develops a sustainable model to diminish health inequities.
- Removes duplication of efforts.

"Since medical imaging touches every facet of patient care, it is vital that we address and rectify the issues surrounding barriers to radiologic care for patients. One way that radiologists can help advance health equity is to help implement strategies that can impact their community, and this could be accomplished by partnering with local community health organizations."

Jade Anderson, MD
American Medical Association Section Council on Radiology Member
Representative to the Radiology Health Equity Coalition
Characteristics of a Successful Partnership

<table>
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<th>Successful Partnership</th>
<th>Unsuccessful Partnership</th>
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<tr>
<td>Goals and objectives for each partner are clear and specific.</td>
<td>Goals are not defined; lack of clarity for shared purpose.</td>
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<tr>
<td>Governance and decision-making structure are established.</td>
<td>Boundaries and roles are not established.</td>
</tr>
<tr>
<td>Information sharing among stakeholders is frequent and substantive.</td>
<td>Communication and engagement among stakeholders is infrequent and sparse.</td>
</tr>
<tr>
<td>Flexibility in the partnership is embraced.</td>
<td>Not allowing for flexibility in the partnership.</td>
</tr>
<tr>
<td>Partnership is mutually beneficial.</td>
<td>Complementary strengths of each partnering organization are not identified.</td>
</tr>
<tr>
<td>Partnership agreements are carefully written and articulated.</td>
<td>Partnership agreements are vague.</td>
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Partnership Opportunities and Resources

RAD-AID USA Women’s Health Access Program
Imaging for a Cause

Imaging for a Cause is a non-profit foundation that coordinates communication between imaging centers and Federally Qualified Community Health Centers.

Partnership Assessment

Radiology Organization Partnership Readiness Assessment (ROPRA).

This tool can serve as a helpful guide for assessing your organizational readiness for community health partnering, defining your organization’s goals and selecting prospective partners.

Community Health Centers

Health centers are community-based and patient-focused programs that offer comprehensive primary care to medically underserved individuals. Health centers typically provide access to integrated care and are uniquely structured to deliver coordinated care to patients in areas where geographic, cultural and economic barriers exist.

Federally Qualified Health Centers (FQHC)

- Health centers that receive federal funding from the Health Resources and Services Administration (HRSA).
- Must adhere to strict guidelines and must incorporate a sliding fee schedule.
- Community-focused and patient-centered. Types of Community Health Centers include Migrant Health Centers, Health Care for the Homeless and Health Centers for Residents of Public Housing.
- Governed by a board that is made up of a majority of patients (>51%).

FQHC Resources

- National Association of Community Health Centers®
  What is a Community Health Center
- Find a Health Center
- State and Regional Primary Care Association
- National Association of Community Health Centers
Other Community-Based Organizations

In addition to Community Health Centers, there are a variety of community-based organizations that provide care to underserved groups. A great example is the Primary Care Coalition, a non-profit health organization located in the Greater Washington, DC area. PCC is a nonprofit healthcare organization that coordinates care for medically underserved populations in Montgomery County and Prince George’s County, MD. PCC aggregates funds to pay for ancillary care for approximately 30,000 adults and children. Furthermore, PCC works with 10 clinics, including three FQHCs in the Greater Washington, DC area. Project Access, a PCC program, helps patients get easy access to specialty care including radiology.

This program has done a remarkable job building partnerships with radiology practices and departments in the Montgomery County, MD area. Their successful partnerships are attributed to negotiating a reduced payment rate for imaging services on behalf of their patients. Project Access is one of a multitude of nonprofit health organizations that have leveraged partnerships to achieve equitable care for all patient populations.

Percentage of the population in 2060 that will be composed of underrepresented groups who are most at risk for experiencing healthcare disparities.13

57%
**Roadmap to Collaboration**

**Know your organization’s strengths and weaknesses.**

Before you reach out to a community organization, you must honestly assess your organization’s needs and gaps. This assessment will help your organization identify limitations assets in your practice and in turn, provide a clear idea of what imaging services your practice/institution can offer to the community health organization.

**Identify key stakeholders.**

Organizations in the community that serve medically underserved populations.

Research organization’s goals and determine if it aligns well with your health equity goals.

**Build trust through engagement and clear objectives.**

Make initial outreach to the community health organization.

**If both parties agree to work together, develop a partnership agreement.**
Lung Screening in an Urban Setting

Radiologists in the Bronx lead a lung cancer screening program targeting an underserved, high-risk urban population.

Key Takeaways

- Inspired by the results of the National Lung Screening Trial, physicians at Montefiore Health System collaborated across disciplines to develop a lung cancer screening program to reduce mortality rates in their high-risk population.

- Screening program directors meet regularly with referring physicians throughout the hospital network to raise awareness and build trust.

- With automated enrollment forms and follow-up reminders in the electronic medical record system, the screening program reduces the burden of patient management for referring physicians.

David Feliciano’s friend went to the doctor for what he thought was just a cough, but imaging revealed something much more serious: Stage 4 lung cancer. “By the time he finally got his lungs checked, it was too late, and four months later, he was gone,” Feliciano says.

Feliciano, himself a former smoker, learned a valuable lesson from his friend’s results. Lung cancer typically doesn’t present symptoms until the advanced stages, when the disease is more difficult to treat and nearly impossible to cure. “You don’t want to wait until you have symptoms to find out you need treatment. You want to catch it right away,” says Feliciano; who smoked for 40 years. “That’s why I get checked every year.”

When it comes to lung cancer, early detection is key. Three-fourths of lung cancer cases aren’t diagnosed until the disease has spread, reducing the five-year survival rate to just 5%. But if lung cancer is detected early, the five-year survival rate can be as high as 90%.

Lung cancer screening programs, like the one launched in December of 2012, the system’s radiologists have screened more than 2,200 patients and identified 55 cancers—about half of them Stage 1 and 2 lung cancer.

Support for Screening

In 2011, the National Cancer Institute published the findings of the National Lung Screening Trial (NLST), which established the evidence to support lung cancer screening. The results revealed that annual LDCT screening could lead to a 20% reduction in lung cancer mortality rates, compared to standard chest X-rays.

Around the same time, the Centers for Medicare and Medicaid Services selected Montefiore as one of 32 Pioneer Accountable Care Organizations (ACOs). Under this model, Montefiore focused on providing enhanced care coordination and illness prevention for Medicare beneficiaries, which its administrators immediately saw the lung cancer screening program as a way to meet these goals and improve patient outcomes related to lung cancer. "Montefiore had just become an ACO," says Furlani, "so it was a propitious moment to get everyone on board with this program."
RAD-AID USA Women’s Health Access Program

RAD-AID is a nonprofit charity (501c3) bringing radiology to medically underserved communities since 2008. The RAD-AID USA Women’s Health Access Initiative enhances breast and cervical cancer outcomes in underserved women by improving access to screening and diagnostic services.

Key Takeaways

• Disparities along racial lines in breast and cervical cancer outcomes are a preventable, yet undeniable truth in the U.S. Compared to White women, Black women with breast cancer are more likely to be diagnosed at a younger age, with more aggressive tumors and at a later stage.

• RAD-AID developed a resource-appropriate, sustainable strategy at pilot sites to reduce breast and cervical cancer disparities across the U.S.

• The program improves linkage to clinical care by integrating community and nursing navigation support to reduce the impact of structural barriers on women’s health.

• With partnership from local community organizations, the program supports community navigation to enhance the pipeline of accessible resources needed to reduce systemic barriers to care, such as lack of transportation or childcare support.

LEARN MORE ABOUT THE INITIATIVE >>
Translated for Care
Radiologists create a translation tool that increases efficiency and improves the patient experience for greater health equity.

Key Takeaways

- Radiologists at Massachusetts General Hospital (MGH) leveraged artificial intelligence to develop a translation tool to enhance care and improve health equity among non-English-speaking patients.
- The web-based tool delivers common imaging exam instructions, such as “hold your breath,” in Spanish, and soon other languages, at the push of a button.
- Since MGH deployed the tool, preliminary data shows that exam times are more predictable for standard chest X-rays while enhancing the patient experience.

During imaging exams, technologists often provide directions about how patients should position themselves to ensure the best image acquisition and quality. But when language is a barrier, providing optimal patient care can be difficult. While in-person translators and telephone-based translation services can help, connecting with those services can sometimes slow down care. It’s a challenge the radiology team at Massachusetts General Hospital (MGH) has overcome with development of an web-based translation app that it is sharing with other specialties and healthcare institutions to help improve patient care across the country and around the world.

MGH radiologists created RadTranslate, a web app that currently delivers imaging instructions in Spanish, Mandarin, and Portuguese—the three most-common languages, after English, that MGH patients speak—after the radiology team at the MGH Chelsea HealthCare Center indicated that they struggled to communicate with members of the predominantly Spanish-speaking community, particularly during the initial COVID-19 surge in early 2020. Research shows that COVID-19 disproportionately impacts non-white and non-English-speaking people in the U.S.1

“Chelsea is located just across the river from Boston and has about 40,000 residents, upward of 70% of whom speak Spanish,” says Patricia Daunais, operations manager for MGH Health Center Imaging. “At Chelsea HealthCare, some of us can navigate a few key phrases in Spanish, such as hold your breath, but the language barrier became pronounced during the initial COVID-19 surge. Patients were so sick that they were unable to comprehend what we were trying to say and waiting for a translator caused care delays.”

Members of the radiology department’s Diversity, Equity, and Inclusion (DE&I) Committee, which includes radiologists and staff, and MGH’s Medically Engineered Solutions in Healthcare (MESH™) Incubator collaborated with the Chelsea HealthCare group to develop RadTranslate. The team launched the web app in late April of 2020 at Chelsea HealthCare, and a few months later, it also began piloting the tool at an MGH mammography screening site. At these two locations, technologists now use the tool between 15–25 times per day and rate it 4 & 5 stars for its ease of use and positive impact on patient care. The most-used phrases include general explanations of the exams and instructions for disrobing and removing jewelry.

“Preliminary data shows we can reduce the variability in exam times and therefore better predict and reduce patient wait times on a standard 10-minute chest X-ray when RadTranslate is used for non-English-speaking patients versus traditional interpreters,” says Marc D. Succi, MD, emergency radiologist and founder and executive director of MGH’s MESH Incubator. "In addition, the care experience is more user friendly and equity and inclusion is enhanced because patients receive the care they need more quickly and in a more understandable way.”

Serendipitous Moment

The idea for RadTranslate grew from an initiative that was unfortunately sidelined because of the COVID-19 pandemic. Before the pandemic unfolded, Daniel B. Chonde, MD, PhD, radiology resident at MGH and co-chair of the radiology department’s DE&I Committee on Education, was working with Succi and other
Improving Access for Women

A Florida nonprofit connects women to medical and social services to help them overcome barriers to care.

Key Takeaways

- A nonprofit organization in Florida is building a network of local breast and cervical care providers as well as community resources to help patients in underserved communities overcome socioeconomic barriers to care.

- Dedicated patient navigators are embedded in partnering clinics and community health centers to guide women through every step of their breast cancer journey. The nonprofit also operates its own mammography screening center.

- In partnership with a local cancer institute, the organization will be enrolling patients in a clinical trial to study the effects of a shortened course of radiation to treat early-stage breast cancer in women of color, who are often underrepresented in medical research.
Radiologists Partner With FQHCs

For over a decade, two radiology groups have partnered with HealthPoint Federally Qualified Health Center to provide imaging to those without healthcare coverage in the Seattle/Tacoma area. The clinic sends an agreed upon number of patients for imaging each month. Several other radiologist groups are doing the same, including in Oregon, Missouri, Texas, Virginia and Minnesota.

Key Takeaways

• Patients most in clinical need are vetted by the health center to assure that they have no options for healthcare coverage or any financial means of their own.

• The radiologists donate their time and the practices also donate the technical component for a set number of patients (usually 6–12 patients per radiologist group per month). There is no paperwork, except for the clinical information, making it particularly simple to administer.

• The health center has agreed to fund follow-up care if there are clinical findings, making the program an especially popular manner for radiologists and staff to help.

• The Imaging for a Cause Foundation, a 501c3 organization, has been highly successful at assisting radiologist groups to smoothly set up the program.
Radiology Health Equity Coalition

Acknowledgements

Many individuals assisted with the compilation of this resource guide. Ms. Karen Patti at the Promise Fund of Florida and Ms. Liz Quam at RBMA Imaging for a Cause developed the case studies, reviewed the Resource Guide and provided feedback. Drs. Max Rosen, Eric Friedberg, Robert Pyatt, RHEC Community Health Outreach Workgroup, also reviewed and provided comments. We appreciate their efforts and assistance in the development of the resource guide.

Commit to Act
Pledge to join the community advancing health equity in radiology.

Submit Resources
Share resources to help your colleagues achieve equity in their practice.

Spread the Word
Talk with your colleagues and community partners about how radiology can advance equity in healthcare.

Grow
Utilize solution-oriented tools to bring more of the community into your practice.

Join the effort

Radiology Health Equity Coalition Mobilization Team

Radiology Health Equity Coalition Partners