

American College of Radiology

Learning Network



ACR LEARNING
NETWORK

Cohort 1 | 2022



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Welcome to the ACR Learning Network

Dear Colleagues,

On behalf of the American College of Radiology® (ACR) Commission on Quality and Safety, I am proud to introduce the ACR Learning Network. Launched in April 2022, and supported by generous funding from the Gordon and Betty Moore Foundation, the program supports teams from radiology practices around the country working to improve performance on challenging diagnostic imaging problems. These teams freely share their experiences with each other and combine their learnings, which eventually will be broadly disseminated within the radiology community.

The genesis of the program extends back many years to the hundreds of project teams my colleagues and I have supported at Cincinnati Children's Hospital and Stanford University. The most important lesson I have learned is also the most humbling one. Quite simply, improvement is hard. It tremendously helps to have a structured environment to assemble and support improvement teams, help them learn the methods and give them opportunities to learn from others attempting to solve the same problem. Plus, improvement is a lot more fun when it's done with others.

I am deeply grateful to everyone in the first cohort of improvement teams who jumped in to define problems, develop process maps, test solutions, gather data — and a myriad of other activities — to complete the improvement training program. They took a chance and took it seriously — demonstrating a real commitment to quality and patient care. The results of their experiences will be published in the months and years to come, but suffice it to say, their work has already made a difference in patients' lives. Now these teams are turning their focus to create a sustainable community and help support subsequent cohorts.

If you are intrigued, please read on to learn more about the ACR Learning Network program goals, structure and current problem topic areas. You will also find reflections from Cohort 1 team members that capture the value and excitement of taking part in this transformational work.

We continue to seek practices dedicated to excellent performance — you don't need to work at a famous institution or already be "perfect" to succeed in the program. Joining this effort requires work and an investment in people — as dedication to excellence always does. But it's definitely doable. Speaking from experience, this satisfying work both builds organizational culture and allows for individual leadership and growth, making it a powerful tool to recruit and retain the best talent.

If you are looking to help create the standard for world-class performance, come join us on our journey.



David Larson, MD, MBA, FACR
Chair, ACR Commission on Quality and Safety
ACR Learning Network Physician Director

The ACR Learning Network: An Introduction

The goals of the ACR Learning Network are to facilitate local improvement in important aspects of patient care, establish a community of shared learning, and recognize the people and organizations who achieve sustained superior performance.

The ACR Learning Network is made up of separate improvement collaboratives, each of which uses the same approach to address different challenges in clinical care. We have started with four collaboratives: Lung Cancer Screening, Mammography Positioning, Prostate MR Image Quality and Recommendations Follow-up.

Sites enter the network by sponsoring a team to participate in the ImPower Program, a four-month, hands-on, interactive team-based quality improvement (QI) training and project-support program. For each of the improvement collaboratives, an expert radiologist supervises four to six teams in a variety of settings throughout the United States, from independent imaging centers to large integrated healthcare systems.

The first year has been focused on signing up the initial cohort of local QI teams, getting the teams organized and teaching them rigorous QI methods as they improve their performance locally. Our first cohort has enthusiastically embraced this challenge, with participants encouraging each other and sharing and learning best practices. We are incredibly proud of the graduates of the first cohort — we have seen remarkable examples of improvement.

The 22 facilities that signed up in 2022 have helped build an important foundation for our next steps, supporting future teams in getting off to an accelerated start, establishing a community of improvers, and discovering and sharing methods that will eventually lead to more widespread improvement.

“The fact that 22 facilities signed up to embrace such major change and graduate is a tribute to the dedication to excellence of the leaders at these facilities.”

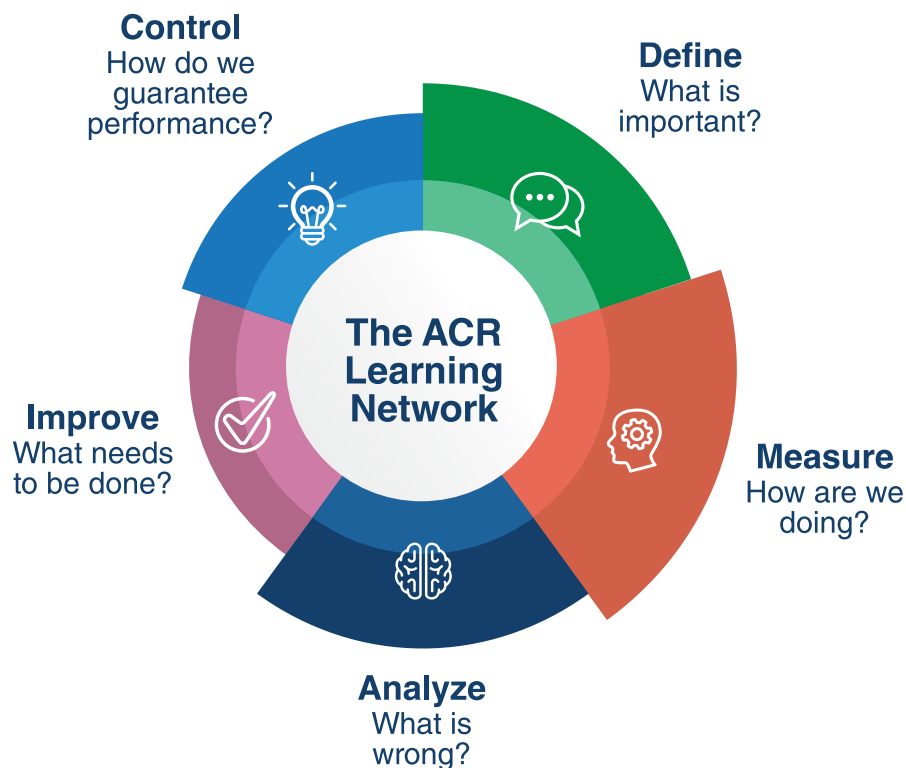
— Mythreyi Chatfield, PhD, ACR Learning Network
Administrative Program Director and ACR Executive
Vice President for Quality and Safety

Improvement Through Measuring

The Learning Network concept is based on the premise that sites that are genuinely interested in improvement will develop good performance measures, rather than expecting performance measurement to drive improvement. As collaboratives simultaneously develop and test measures, they help ensure that the measures are useful and practical. They also ensure that all sites are measuring the same performance in the same way so they can objectively determine what strategies lead to the best performance.

“ The learning network approach is different because collaboratives use the measures while gathering data to see if they’re improving. They can try things out and adjust as they go along, and later may apply changes to measures based on discoveries across the collaborative cohorts.”

— Judy Burleson, MHSA, Project Director, ACR Learning Network



ACR Learning Network Organizational Structure

We designed the ACR Learning Network to operate and evolve through a “community of improvers,” sharing best practices, measurements and results.

The overall network is led by:

- A physician director
- An administrative director
- Learning network leadership committee
- Metrics and quality improvement (QI) program directors
- Administrative support

The network currently hosts four improvement collaboratives, each supported by:

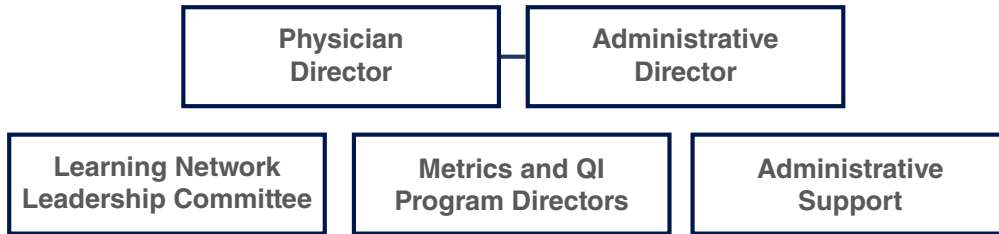
- A radiologist leader
- An administrative leader
- Dedicated staff, including a learning facilitator, administrative support specialists and data support specialists

Within each improvement collaborative, four to six healthcare sites work in unison to:

- Solve common problems
- Develop and validate solutions locally
- Share insights and learn from each other
- Create global approaches for lasting improvement

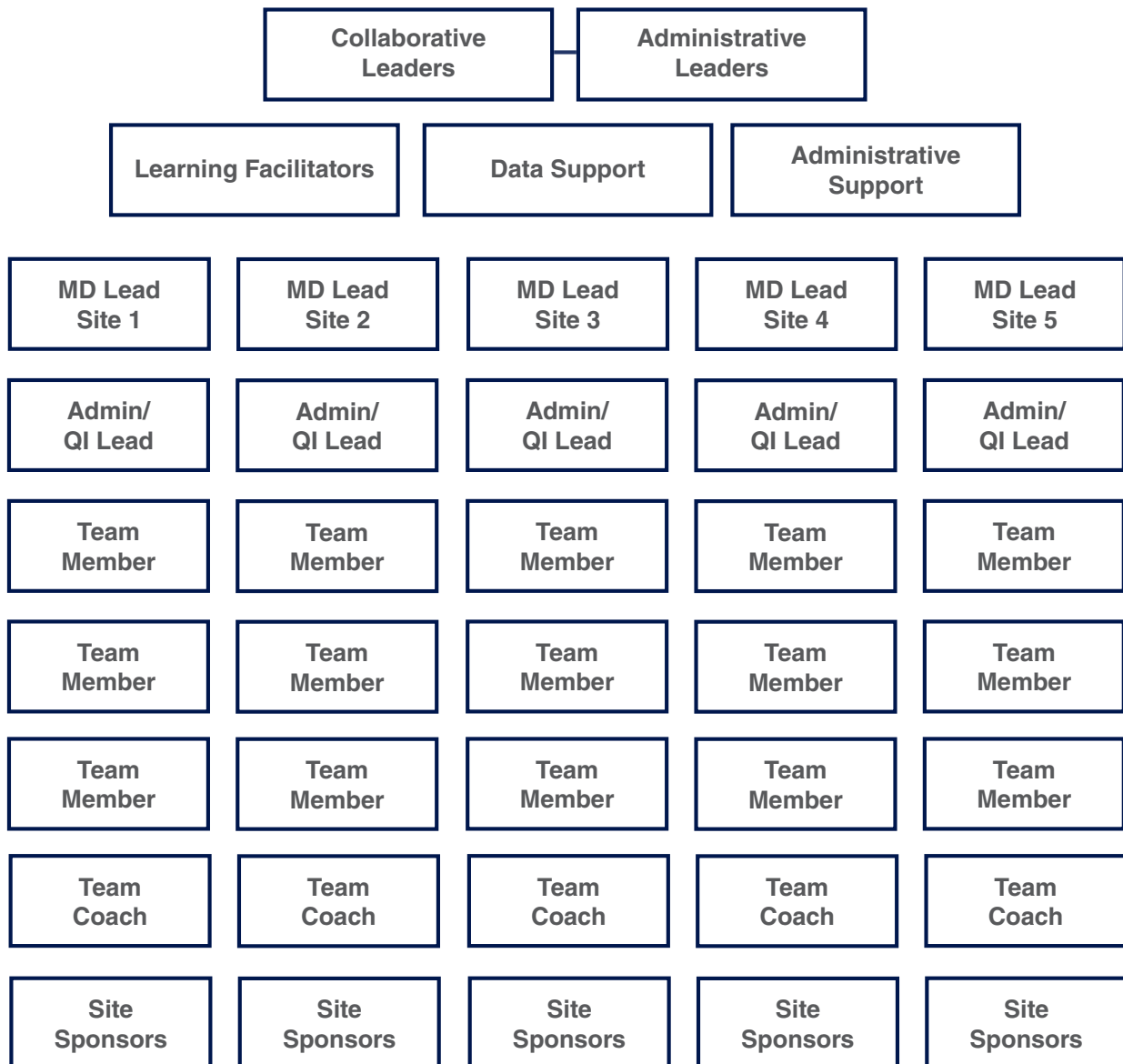
ACR Learning Network

ACR Program Leadership



Improvement Collaborative Structure

Collaborative Advisory Committees





ACR Learning Network Development and Implementation Team

This dedicated core team has shaped the design, structure and functions of the ACR Learning Network from the program's inception. They tirelessly work to ensure that participating organizations and affiliated team members gain valuable experiences. One way is through assessing emerging and urgent needs in diagnostic imaging. With this knowledge, the development and implementation team recommends areas that have significant impact on patients' health and can benefit most from a learning system approach.

David Larson, MD, MBA, FACR

As Senior Vice Chair of Strategy and Clinical Operations at the Stanford University School of Medicine Department of Radiology, Dr. Larson is a recognized expert and speaker on radiology quality improvement and patient safety. His experience includes roles as the founder of the Realizing Improvement through Team Empowerment (RITE) program at Stanford Hospital and the Quality and Safety Trustee for the American Board of Radiology. He is the Principal Investigator and the Physician Director of the ACR Learning Network. He currently serves as Chair for the ACR Commission on Quality and Safety.

Mythreyi Chatfield, PhD

As ACR Executive Vice President for Quality and Safety, Mythreyi worked with Dr. Larson to apply his Stanford and Cincinnati Children's experience to the creation of the ACR Learning Network. She helped organize the program, enabling it to scale up using the strengths of the ACR, and now oversees its operational aspects. She is the Co-Investigator and Administrative Director of the ACR Learning Network.

Judy Burleson, MHSA

Judy is both ACR Vice President for Quality Management Programs and Project Director of the ACR Learning Network. In these roles, she oversees performance measure development and implementation, drawing on her quality management expertise to provide overall project administration for the network.

Kandice Garcia Tomkins, MS, RN

Kandice worked with Dr. Larson on quality improvement and education at Stanford and applies this knowledge and her experience as a registered nurse in interventional radiology to her role as Quality Improvement Director. She's in charge of developing the ACR Learning Network education and improvement frameworks as well as the ACR ImPower Program.

Kay Zacharias-Andrews

Kay is the Quality Management Programs Specialist for ACR and Administrative Director of the ACR Learning Network. She works closely with Kandice and the IT team to facilitate participant access to sessions, materials, remote meetings and more.

Rishea Middlebrooks

As ACR Associate Quality Programs Specialist, Rishea applies her project management and quality improvement expertise to similar challenges in the ACR Learning Network. Her work includes coordinating, coaching and monitoring changes in the process.

How the Improvement Collaboratives Succeed

Each improvement collaborative supports teams at four to six facility sites. Across institutions, these teams work to solve the same problems, learning and sharing as they go, and the ACR ImPower Program assists them at every step.

A Model of Commitment and Progress

Each improvement collaborative has the support of a radiologist, administrative leader and dedicated staff, including a learning facilitator, administrative support specialist and data support specialist.

“ Creating a model for 20-plus projects improving simultaneously across four collaboratives was a unique challenge, but it’s worth it. So much of process improvement is often implemented from the top-down — we’re empowering the frontline staff instead, which improves the culture of the organization as much as it improves the process.”

— Kay Zacharias-Andrews, Administrative Director,
ACR Learning Network

Local Site Teams

At each healthcare site, an interdisciplinary team works at the local level and with other teams in a collaborative. Together, they solve common problems, share insights, learn from each other and develop global approaches to improvement.

Each site team includes:

Project Sponsors

These are high-level organizational leaders who commit to supporting the administrative leader and project teams in their work in the collaborative.

Administrative Director

The Administrative Director is the leader at the site whose vision enables the project team to be successful by providing resources, galvanizing team members, and regularly checking in with the teams and the sponsors to ensure steady progress toward achieving project goals.

Team Leader

The Team Leader serves as the team manager, ensuring that efforts are well coordinated, each team member is productively engaged and that the team makes steady progress toward its goal. The Team Leader communicates regularly with team members and with the Administrative Director and QI Coach.

Physician Leader

In partnership with the Team Leader, the Physician Leader provides medical direction and helps lead the team, ensuring the changes made have a meaningful impact on patient care.

Team Members

Up to four frontline staff members per team work together to do the heavy lifting of understanding and improving the process, and serve as liaisons with other staff members throughout the project. Teams may also include an IT specialist, staff skilled in data analytics and other roles as needed.

QI Coach

These quality improvement professionals provide the team with timely teaching and project support.



Mammography Positioning Improvement Collaborative team members from ChristianaCare Helen F. Graham Cancer Center and Research Institute, Newark, DE

“ ImPower is about more than just improving your process; it’s about improving your culture and community with trust, relationships and commitment, both in your organization and across others.”

— Kandice Garcia Tomkins, Quality Improvement Director,
ACR Learning Network



ACR ImPower Creates a Culture of Improvement

Each of the collaborative sites participates in the ACR ImPower Program, which facilitates shared learning as colleagues identify ways to improve.

ImPower follows the same philosophy as Stanford's RITE program: When the people doing the work are taught and empowered to solve problems, the solutions become better, the frontline staff embraces the change and the organization's ability to improve increases.

ImPower is a program focused on structured improvement. Site teams participate in ten learning sessions over four months, tracking and reporting data about their progress on a weekly basis. Each team works on the collaborative-specific problem alongside other organizations, all solving the same problem, at the same time, using the same methods, but in a way tailored to the local environment. This makes collaboration a natural and effective part of the problem-solving process.

ImPower supports participants through:

- Online tutorials
- Tools and templates for standardized "A3 Thinking" models
- Assistance with problem solving and change management
- An online platform where participants encourage each other and learn best practices
- Clear and objective project tracking to ensure progress

The approach to improvement helps teams create agreement on the specific problem they are working to solve; develop, test and refine potential solutions; and tell the story to their co-workers and sponsors.

Continued Participation Enables Continued Success and Recognition

After completing the ACR ImPower Program, organizations continue their improvement journey as members of the ACR Learning Network. They regularly share performance data, knowledge about new processes, tools and support resources. As part of the learning network community, they engage with other cohort teams — providing mentorship to new cohort teams and sharing learnings to further collaborative objectives. This supports:

- Learning from the best
- Idea generation/sharing best practices
- Measure development or redefining collaborative measures, as needed

Members have ongoing opportunities for recognition of their work at their institutions and across their health systems, including participating in publications and being featured in ACR publications.

As it matures, the learning network can benefit a broader community by publishing collective results, providing performance metrics and encouraging improvement at any site.

First Cohort Sites See Immediate Benefits

The 22 sites participating in the learning network's first cohort graduated from the ACR ImPower Program in mid-November 2022 and achieved measurable improvements for their facilities as well as others. They also created important groundwork for future cohorts in areas such as:

- Defining problems
- Refining quality improvement measures
- Developing process maps



“ Learning to dive deep into root causes and solidify key drivers will allow me to tackle any and all areas of opportunity.”

— Lynn Rudin, Cleveland Clinic, QI Coach,
Mammography Positioning Improvement Collaborative



“ The program provides you and your project team with skills and tools to use long term. It also gives you the opportunity to network with other groups working toward the same outcome. You have to put in 100% each week and be prepared to tackle challenges, but it is rewarding to build a stronger team and celebrate the fruits of your labor together.”

— Anya Johnson, CAPM, Team Leader, ARA- A Radiology Partners Practice, Recommendations Follow-up Improvement Collaborative



“ The ACR Learning Network gives you the opportunity to look at a quality improvement project from a different perspective, sparking creativity, fostering new connections and learning along the way!”

— Carly Zandarski, MBA, RDMS (BR)(OB/GYN), Team Leader, University of Pittsburgh Medical Center, Prostate MR Image Quality Improvement Collaborative



“ I learned to look beyond my own silo and engage with my team members in radiology as well as across the institution. I highly value the relationships I forged during this time, and I’m excited to continue our work to increase lung cancer screening.”

— Margaret Lin, MD, Physician Leader, Stanford Health Care, Lung Cancer Screening Improvement Collaborative

The Lung Cancer Screening Improvement Collaborative

For both women and men in the United States, lung cancer continues to be the biggest killer among cancers. Yet up to 90% of eligible patients currently don't receive screenings. Facilities and their patients are missing out on early cancer detection, improved care and better health outcomes.

Early screening also reduces deaths from lung cancer. The five-year survival rate of 18.6% is significantly lower than other leading cancers. Most individuals have advanced stage disease at the time of their diagnoses. However, with earlier screening and diagnosis, the five-year survival rate increases dramatically — to nearly 76% for stage 1 lung cancer.

The Collaborative Goal

The Lung Cancer Screening Improvement Collaborative aims to significantly increase the number of patients receiving lung cancer screening — and substantially decrease lung cancer deaths. Participating teams gained the structure and framework to design a robust lung cancer screening program to increase screening volume and improve screening rates.

To accomplish this goal, teams expanded on previous partnerships between facilities. The increased support for developing, sharing and implementing performance measures and improvement strategies helped them overcome common barriers and bring in additional eligible patients for screening. Teams augmented overall collaboration and learning by sharing their insights with many other programs.

“ We wanted to tackle a major problem: In 2022, still less than 10% of eligible patients get lung cancer screening. In our collaborative’s first round, we were able to measure the number of screening exams all the sites performed each week throughout the year. This alone helped us meet our goals. There’s such huge potential.”

— Neville Irani, MD, Collaborative Leader



Collaborative Leader

Neville Irani, MD
Founder of the Healthcare
Quality Improvement Platform



Learning Facilitator

Tiffany Gowen, MHA
Director, Commission on Patient-
and Family-Centered Care
ACR Lung Cancer Screening
Steering Committee

Advisory Committee Members

Ella Kazerooni, MD, FACR
Jan Eberth, PhD
Sundeep Nayak, MD
Angela Criswell, MA
Debra Dyer, MD, FACR
Carey Thompson, MD, MPH

“The United States Preventive Services Task Force recommended annual lung cancer screenings for high-risk patients beginning in 2013 with expanded eligibility in 2021. Yet, low screening levels persist in nearly every state.”



Lung Cancer Screening
Improvement Collaborative

ACR LEARNING NETWORK

Lung Cancer Screening Improvement Collaborative Teams

Duly Health and Care | Downers Grove, IL

Duly Health and Care is the largest independent, physician-led medical group in the Midwest serving members across 150 locations.



Team Leader

Theresa Levigne
Radiology Director

Physician Leader

Lekshmi Nair, MD
Radiologist/Lung Cancer Screening
Program Physician



QI Coach

Melinda Willis
Quality Manager of Radiology
Lung Cancer Screening
Program Manager

Team Sponsor

Nasir Siddiqui, MD
Chair of Radiology

Team Members

Jessica Gibbs
Radiology Coordinator
Lung Cancer Screening
Program Support

Michelle Jones
Nurse Navigator for the
Cancer Resource Center

“ We nearly reached our goal of increasing lung screening volumes by 50%, and we gained many champions for lung screening throughout our organization. We also developed valuable relationships with other institutions that will continue long into the future.

— Melinda Willis, QI Coach

Radiology Associates of Daytona Beach | Daytona Beach, FL

Radiology Associates serves patients across three counties in Eastern Central Florida.



Team Leader

Kitty Lewis, RT(R)(CT)
CT/3D Technologist

Physician Leader

Stephen Sevigny, MD
Musculoskeletal Radiologist



QI Coach

Kevin Dirlam, BS, RT(R)(MR)
(MRSO)
Regulatory and Compliance
Manager, MRSO (MRI Tech)

Team Sponsor

Marcia Wilson, (R)(CT)
Director of Operations

Team Members

Kendall Reeves
Lung Screening Registrar

Jordan Rucker
Data Analyst

“Change doesn’t happen overnight, and it takes a village to make an impact! We learned so much by participating in the ACR Learning Network. Communicating your goals also means educating patients.”

— Kevin Dirlam, QI Coach

Northeast Georgia Health System (NGHS) | Gainesville, GA

NGHS is a not-for-profit community health system dedicated to improving the health and quality of life of the people of northern Georgia.



Team Leader

Tracy Greer RT(R)(M)(CT)
CT Manager



QI Coaches

Paula Grater, RT(R)(VI)(ARRT)
PI Coordinator, Imaging

Haley Patterson
Operational Excellence Coach

Team Members

Angie Caton
Oncology Assistant Nurse
Manager, LCS Navigator,
Community Cancer Education

Lori Hulsey
Manager, Call Center
Patient Assessment
Standards Coordinator

Donna Kinslow
Analyst, Clinical Informatics,
IT Radiant

Andrea Queen
CT Technologist

Physician Leaders

Rami Arfoosh, MD
Pulmonologist

Michele Fortner
Director of Oncology Services

Matthew Scott, MD
Radiologist

Team Sponsors

Rami Arfoosh, MD
Pulmonologist

Layne Mitchell
Executive Director of
Diagnostic Imaging

Connie Phelps
Oncology Manager

“It’s been so beneficial to see the similarities and differences in how people approach improvement. The collaboration and shared learning between ACR and other organizations is invaluable!”

— Haley Patterson, QI Coach

Stanford Health Care | Palo Alto, CA

Stanford Medicine Radiology serves patients in the San Francisco Bay area.



Team Leader

Monglan Duong
CT Manager



QI Coaches

Amin Etemad
Radiology Quality Project Manager



Allison Faust
Radiology Quality Improvement
Manager

Team Members

Dorothy Doan
Nurse Navigator

Sheila Galuppo
Imaging Services Marketing
Manager

Jackieline Lee
Radiology Nurse Coordinator

Adnan Tufekcic
CT Technical Coordinator

Physician Leader

Margaret Lin, MD
Thoracic Radiologist

Team Sponsors

Ann Leung, MD
Divisions Chief,
Thoracic Imaging

Marc Willis, DO, MMM, FACR
Associate Chair of
Quality Improvement

Christoph Zorich
Director of Imaging Services

“ I learned to look beyond my own silo and engage with my team members in radiology as well as across the institution. The other sites were also a terrific and inspiring resource for best practices.”

— Margaret Lin, MD, Physician Leader

University Hospitals of Cleveland | Cleveland, OH

The University Hospitals of Cleveland has provided patients with lung cancer screening services across 16 counties in Greater Northeastern Ohio since 2011.

Team Leader

Leslie Whalen, MHA, BSN, RN
Lung Health Program Manager

QI Coach

Kelly Purcell
Senior Quality Improvement
Nurse

Team Members

Les Ciancibello
Radiology Supervisor

Nicole Mitchell
Lung Cancer Screening
Nurse Navigator

Leila Woehrle
Lung Cancer Screening
Nurse Navigator

Physician Leaders

Chip Gilkeson, MD
Division Chief, Radiology

Roy Raad, MD
Thoracic Radiologist

Team Sponsor

Matt Kemmann
Director, Strategic Planning
and Analytics



Team sponsor and team leader from University Hospitals of Cleveland.

“Joining the collaborative helped us perform a deep dive into our own barriers ... The program was thoughtful and effective, breaking quality improvement into insightful segments that make obtaining your goals a reality.”

— Leslie Whalen, Team Leader

University of Rochester Medical Center | Rochester, NY

The University of Rochester Medical Center is a seven-hospital health system serving patients in the Greater Rochester area of New York and surrounding counties.



Team Leader

Mary Jo Evans
Lung Cancer Screening
Administrator



QI Coach

Erin Panter
Quality Project Manager

Team Members

Dominic Defelice, MD
Highland Family Medicine

Brooke Grandusky-Green
Associate Director of Informatics
for Imaging Sciences

Angela Portanova
Lung Cancer Screening
Patient Navigator

Cherish Zaccari
PCN Population Health
Manager

Physician Leader

Ben Wandtke, MD, MS
Vice Chair, Quality and Safety
Chief of Diagnostic Imaging,
F.F. Thompson Hospital Associate
Professor, University of Rochester

Team Sponsors

Stephen Judge, MD
Medical Director of Primary Care Network

Ben Wandtke, MD, MS
Vice Chair, Quality and Safety

“ I learned more about the quality improvement process, the benefits of data and how that data can be powerful to assist with solving a problem. This was extremely gratifying!”

— Brooke Grandusky-Green, Team Member

The Mammography Positioning Improvement Collaborative

Breast cancer is the second-most common cancer in American women next to skin cancer and second only to lung cancer as a cause of cancer death.

Early detection and treatment of breast cancer significantly reduce illness and saves lives. Screening mammography is the main imaging tool for early detection of breast cancer and has been estimated to have decreased breast cancer mortality by at least 30%.

The way in which the breast is positioned on the mammogram is crucial for image quality. Poor mammography positioning is the primary cause of technically inadequate mammograms and may contribute to undetected breast cancer. In one study, only 67% of mammogram images met the positioning criteria set by the ACR.

The Collaborative Goal

The Mammography Positioning Improvement Collaborative seeks to improve breast cancer detection through screening.

Participating teams work to create a standardized system for mammography positioning, evaluation and ongoing monitoring. The goal is to consistently meet ACR criteria for mammography positioning.

An existing image quality scoring system, developed by a Stanford University team as part of the RITE program, provided a foundation. The Stanford team used this scoring system along with systematic quality improvement techniques, to raise the monthly percentage of mammograms meeting passing criteria from 67% to greater than 90%.

Collaborative participants used a similar approach. Together, the teams defined image quality criteria and used systematic improvement methods to develop and implement successful strategies that achieved improvement in mammography positioning at their local sites. Their efforts now serve as a model for programs across the United States.

“ Our collaborative participants are doing incredible work to improve mammography positioning. They are working together and learning from each other to develop solutions that are effective at their local sites. And the results they’ve achieved are truly inspiring.”

— Sarah Pittman, MD



Collaborative Leader

Sarah Pittman, MD
Clinical Assistant Professor,
Department of Radiology
Stanford University School of
Medicine



Learning Facilitator

*Tracy Purdie, BS RT(R)(M)(CT)
CBDT*
Senior Accreditation Specialist
ACR Breast Imaging
Accreditation Program

Advisory Committee Members

Patricia Cowart, RT
*Stamatia Destounis, MD, FACR,
FSBI, FAIUM*
Louise Miller, RT
Dana Smetherman, MD, MPH, MBA, FACR
*Margaret Szabunio, MD, FACR,
FAAWR*

Poor mammography positioning impacts image quality and may contribute to undetected breast cancer on both mammography and digital breast tomosynthesis.



Mammography Positioning
Improvement Collaborative
ACR LEARNING NETWORK

Mammography Positioning Improvement Collaborative Teams

ChristianaCare Helen F. Graham Cancer Center and Research Institute | Newark, DE

ChristianaCare serves patients across Delaware, Maryland, Pennsylvania and New Jersey.



Team Leader

Kelly Nahodil
Senior Technologist, Breast Imaging



QI Coach

Shannon Hostetter
Breast Center Operations Manager

Team Members

Shayla Morakinyo
Technologist, Breast Imaging

Stephanie Piser
Technologist, Breast Imaging

Jennifer Reedy
Technologist, Breast Imaging

Physician Leaders

Jennifer Rowland, MD
Section Chief, Division of Breast Imaging

Catherine Tuite, MD
Physician Radiologist, Breast Imaging

Team Sponsors

Kimberly Evans
Vice President, Imaging Services

Vinay Gheyi, MD
Chairman, Department of Radiology
Medical Director, Imaging Services

“ We have transformed the efficiency and time management of intake and direct service by eliminating wait time and adding a more personalized care experience with our technologist. We can do extraordinary things when we lead with love and excellence.”

— Shannon Hostetter, QI Coach

Cleveland Clinic | Cleveland, OH

Cleveland Clinic is a nonprofit multispecialty academic medical center serving communities in northeast Ohio.



Team Leader

Lynn Rudin, BSPH, R.T.(R)(M)

Clinical Manager



QI Coach

Richelle Weber, R.T.(R)(M)(QM)

Quality Coordinator

Team Members

Nicole Douglas MEd, RT(R)(M)

Lead Technologist

Krista Lauren, R.T.(R)(M)

Lead Technologist

Shelley Mannarino, R.T.(R)(M)

Lead Technologist

Physician Leader

Laura Shepardson, MD, MS

Section Head, Breast Imaging

Team Sponsor

Laura Shepardson, MD, MS

Section Head, Breast Imaging

“ True change takes time and a well-formed team to implement. The best outcomes are achieved when everyone is engaged, and their voices are heard ... The sense of accomplishment you feel at the end will inspire you to make process improvement part of your daily work.”

— Lynn Rudin, Team Leader

MemorialCare Breast Center at Long Beach Memorial Long Beach, CA

MemorialCare Breast Center at Long Beach Memorial serves patients in the Greater Long Beach and Los Alamitos areas of California.



Team Leader

*Bree Hysjulien, CRT, RT(R)(M)
(AART), MS*
Breast Center Supervisor



QI Coach

Cathy Kopy, MS
Accreditation Coordinator for
the Todd Cancer Institute

Team Members

*Chancey Cooley, CRT, RT(R)
(M)(AART)*
Team Lead

*Kimberly Frans, CRT, RT(R)(M)
(AART), BS*
Technologist

Patricia Lopez
Administrative Assistant

Physician Leaders

Maya Sardjono, MD
Interpreting Physician

Angela Sie, MD
Lead Interpreting Physician

Gretchen Stipek, MD
Interpreting Physician

Team Sponsors

Sandy Lopez, CRT, RT(R)(M)(AART), BS
Program Director of Breast Imaging

Lisa Poormon, PT, DPT, MEd
Executive Director of Todd
Cancer Institute



*Improvement collaborative team from MemorialCare Breast Center
at Long Beach Memorial.*

Stanford Health Care | Palo Alto, CA

Stanford Radiology is an academic practice serving the San Francisco Bay Area.



Team Leaders

Audrey Strain
Mammography Manager



Patricia Cowart
Mammography Technical
Coordinator



QI Coach

Paulo Castaneda
Director of Imaging Services

Team Members

Allison Faust
Radiology Quality
Improvement Manager

Michelle Takeuchi
Mammography Technologist

Physician Leader

Sarah Pittman, MD
Breast Radiologist

Team Sponsors

Wendy DeMartini, MD
Division Chief of Breast Imaging

Gloria Hwang, MD
Associate Chair of Performance
Improvement

“Years after an initial project, it’s good to reassess and see if additional improvements can be made. Assume nothing until validated with data. Be creative in your interventions.”

— Audrey Strain, Team Leader

Solis Mammography | Addison, TX

Solis Mammography operates more than 100 mammography centers in 13 major cities, including Dallas-Fort Worth, Houston, Denver, Phoenix, Chicago, Philadelphia, Columbus, Cincinnati, Nashville, Greensboro, Miami, Fort Lauderdale and, through its affiliated brands, Washington Radiology and Progressive Radiology, in Washington, DC, Maryland and Virginia.



Team Leaders

Melissa Bell, RT(R)(MR)
Center Director



Karen Curry, RT(R)(M), CNBI, LSSYBH
Clinical Education
Program Manager



Christina Lyle, RT(R)(M)(BD)(BS), RDMS(BR), BHCN, LSSYBH
Center Director

QI Coaches

Michelle Benami, MA, EdHD, RT(R)(M)
Director of Learning and Development



Amber (Ledesma) Moniz, RT(R)(M)
Director of Quality

Team Members

Brittany Boom, RT(R)(M)(BS)
Lead Mammography Technologist

Sarah Davidson, RT(R)(M)
Mammography Technologist

Shannon Hash, RT(R)(M)
Mammography Technologist

Valerie Smith, RT(R)(M)
Lead Mammography Technologist

Kathleen Terzulli, RT(R)(M)
Mammography Technologist

Physician Leaders

Andrea Parada, MD
Radiologist/LIP

Jill Wilkens, MD
Radiologist/LIP

Team Sponsor

Chirag Parghi, MD
Chief Medical Officer

“ We benefit from slowing down, looking carefully at root causes, establishing key drivers and piloting interventions before implementation. It may take time up front but it’s a worthy investment. Improvement is a team effort, and everyone’s voice is valuable.”

— Michelle Benami, QI Coach

Texas Health Harris Methodist Hospital | Fort Worth, TX

Texas Health Harris Methodist Hospital provides screening, diagnostic, ultrasound and biopsy services to the residents of Tarrant County and surrounding communities.



Team Leaders

Rebecca Wallace, RT(R)(M)
Supervisor, Breast Center

Physician Leader

Kelly C. Starkey, MD
Medical Director,
Kupferle Breast Center Lead
Interpreting Physician

Team Members

Kaye-Lani Mariani-Hall, MSRS,
RT(R)(M)
Mammographer

Kerry Hogue, RT(R)(M)
Mammographer, Texas Health
Fort Worth

Team Sponsor

Lesley Kibel, MHA, CN-BM
Manager, Texas Health Fort Worth
Breast Program Radiology Clerical,
Radiology Patient Experience



Improvement collaborative team from Texas Health Harris Methodist Hospital.

The Prostate MR Image Quality Improvement Collaborative

Magnetic resonance (MR) imaging is increasingly used to diagnose prostate cancer, among the most common cancers in men. Up to 40% of these exams can have insufficient image quality, which can lead to diagnostic errors.

A prostate MR image can determine who needs a biopsy and who may safely avoid one. But prostate MR imaging is challenging to consistently perform well, requiring special training, and expertise, as well as appropriate MR imaging equipment. What's more, no specific requirements currently exist for education and training. No rigorous programs ensure the quality of imaging equipment, and no uniform measurements gauge the quality of prostate MR images.

The Collaborative Goal

The Prostate MR Image Quality Improvement Collaborative aims to significantly enhance prostate cancer detection at local facilities.

Participating teams worked to develop a standardized quality assurance program. The goal was to improve the percentage of MR imaging prostate exams that meet the standards of Prostate Imaging Quality (PI-QUAL) criteria.

Achieving this goal involved selecting the appropriate equipment, using suitable pulse sequences and monitoring image quality with both quantitative measures and practical interventions. As a result, providers, regulators and customers today have a new standard for high-quality prostate MR imaging across the United States and beyond.

“ To solve the problem of MR image quality — and to save lives — the collaborative relied on the ImPower Program for quality improvement. We worked together to create a standardized system for increasing the percentage of MR exams that met the quality criteria of the prostate imaging quality system.”

— Andrei Purysko, MD, Collaborative Leader



Collaborative Leader

Andrei Purysko, MD
Clinical Assistant Professor of
Radiology, Cleveland Clinic
Lerner College of Medicine



Learning Facilitator

Marcello Acosta, RT(R)(MR)(ARRT)
Accreditation Specialist
ACR MR/CT Accreditation Program

Advisory Committee Members

Clare Tempany, MD, FACR
Jeff Weinreb, MD, FACR, FISMRM, FSABI
Hung-Jui (Ray) Tan, MD, MSHPM
Baris Turkbey, MD
Rachel Harris, RT(R)(MR)

According to estimates,
the appropriate use of
prostate MRI could safely
reduce unnecessary biopsy
rates by approximately
25%



Prostate MR Image Quality
Improvement Collaborative
ACR LEARNING NETWORK

Prostate MR Image Quality Improvement Collaborative Teams

AdventHealth | Orlando, FL

AdventHealth provides imaging services across Central Florida, partnering with 15 hospitals and eight emergency departments at 10 imaging centers.



Team Leader

Ann Hester, BS RT(R)(MR), MRSO, (MRSC)TM
Senior Modality Manager, MRI



QI Coaches

Elizabeth Evans, MBA, RT
Senior Modality Manager, XR

Rishea Middlebrooks, CAPM, MHI
ACR Coach

Physician Leader

Christopher Smith, MD
Body Section Radiologist

Team Sponsors

Nick Feranec, MD
Body Section Chief Radiologist

Lester Rilea
Executive Director, Imaging



Improvement collaborative team from AdventHealth Imaging Center Lake Mary

Team Members

Harris Alam
Medical Student

Rachel Diaz, RT(R)(CT)(MR)
Supervisor MRI at Daytona Beach

Cristina Dodge, DABR, MRSE (MRSC)TM
Diagnostic Medical Physicist

Herron Gomillion, MD
Radiology Resident

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Faith Hutton, BSRS, (RT)
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Lin Luo, MD
Radiology Resident

Deanna Mongello, BSRT(R)(M)(MRI)
Supervisor MR at Celebration

Christine Rynkewicz, RT(R)
Manager AHIC Lake Mary

Connor Woodward, MD
Radiology Resident

Boston Medical Center Department of Radiology | Boston, MA

Boston Medical Center serves a wide variety of patients in the Greater Boston area as the largest safety-net hospital in New England.



Team Leader

Sara Martin
MRI Quality Specialist



QI Coach

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Quality & Patient Safety
Specialist RN

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Baojun Li, PhD, DABR
Chief Medical Physicist Department
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Physician Leader

Kevin Chang, MD
Section Chief of Abdominal
Imaging

Team Sponsors

Diana Diaz
Director of Radiology Operations

Jodi Larson, MD
Chief Quality Officer

Jorge Soto, MD
Chair of Radiology

“As a team, we learned to pause solution-based thinking until we’ve gathered as much information as possible for a current state and identified root cases.”

— Andrea Griffin, QI Coach

Duke University Medical Center | Durham, NC

Duke University Medical Center is a group of patient care, education and medical research facilities on the medical campus of Duke University in Durham, North Carolina.



Team Leaders

Erica Owenby
MRI Supervisor



Chris Beasley
MRI Supervisor



QI Coach

Scott Robertson, PhD
Medical Physicist

Team Members

Lisa Wall
MRI Technologist

Bradley Gray
MRI Body Protocol Technologist

Eddie Song
MRI Body Protocol Technologist

David McLaughlin
MRI Technologist

Candice Pearce
Administrative Assistant

Waleska (Waly) Pabon-Ramos, MD
Radiologist, Vice Chair of
Quality and Safety

Physician Leader

Rajan Gupta, MD
Chief, Abdominal Imaging

Team Sponsor

Issack Boru
Chief MRI Technologist

“The structured ACR approach to QI and our highly-engaged multi-disciplinary team undeniably helped us to improve our prostate MR image quality. This collaborative also fueled an ongoing commitment to continuing our journey towards optimal image quality.”

— Rajan Gupta, MD, Physician Leader

Intermountain Healthcare | Salt Lake City, UT

Intermountain Healthcare serves the needs of people across the Intermountain West — primarily Utah, Idaho, Nevada, Colorado, Montana, Wyoming and Kansas.



Team Leader

Linda Campbell
MR Internal Process
Control Coordinator

Physician Leader

Logan McLean, MD
Section Chief, Abdominal Imaging



QI Coach

TJ Smith
QI Consultant (organization level)

Team Sponsors

Lisa Eastman
Internal Process Control
Director of Quality and Safety,
Imaging Services

Team Members

Steven Buie
MRI Technologist

Nicholas (Nick) Marshall
MRI Coordinator

Kyle Rasmussen
MRI Technologist

Ben Gordon, MD
Medical Director,
Imaging Services



University of Pittsburgh Medical Center (UPMC)

Pittsburgh, PA

The UPMC Department of Radiology serves patients in the Pittsburgh tri-state area, including western Pennsylvania, eastern Ohio and northern West Virginia.



Team Leader

*Andrews Grills, BSHA, RT(R)
(CT)(MR)*
Manager, Imaging Services,
Passavant

Physician Leader

Alessandro Furlan, MD
Abdominal Imaging Section Chief



QI Coach

*Carly Zandarski, MBA, RDMS(BR)
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Margarita Zuley, MD, FACR
Vice Chair of Quality

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*Sue MacIntyre, CRA, MHA,
RT(R)(MR), MRSO, (MRSC)*
Manager, Imaging Services, SHY/HCC

Jeff Misejka
MRI Clinical Specialist, Passavant

“The ACR Learning Network gives you the opportunity to look at quality improvement from a different perspective, sparking creativity, fostering new connections and learning along the way.”

— Carly Zandarski, QI Coach

The University of Texas MD Anderson Cancer Center

Houston, TX

The University of Texas MD Anderson Cancer Center is devoted exclusively to cancer patient care, research, education and prevention.

Team Leader

Ken-Pin Hwang, PhD
Faculty

Physician Leader

Tharakeswara Bathala, MBBS, MD
Faculty

QI Coach

Valentine Boving, PhD
Senior Healthcare Systems Engineer

Team Sponsor

Catherine Devine, MD
Chair Ad Interim

Team Members

Priya Bhosale, MD
Faculty

Fawna Doiron
DI Admin Director

Mamie Gao, MD
Resident R4 (Fellow)

Brandy Reed, MBA, RT
Supervising Imaging Technologist

Devaki Shilpa Surasi, MBBS
Faculty

The Recommendations Follow-Up Improvement Collaborative

Up to 10% of radiology reports contain follow-up recommendations, and concerns about lung nodules represent roughly 50% of these recommendations. Yet approximately half of the recommended follow-up exams are never performed. This puts patients at risk of delayed diagnoses, including diagnoses of lung cancer, and increases healthcare costs.

It's particularly critical to communicate the need for test results during transitions of care, such as when moving patients between the hospital and outpatient settings. Such transitions are common in hospital-based radiology practices.

The Collaborative Goal

The Recommendations Follow-Up Improvement Collaborative aims to improve the early detection of lung cancer for incidentally detected lung nodules. Participating teams worked toward more efficient and effective follow-up processes. Their end goal:

- Improve health outcomes
- Decrease the risk of missed cancers
- Generate a return on investment
- Reduce malpractice risk for institutions and providers

The collaborative developed and standardized performance metrics, using these metrics to systematically measure diagnostic performance. Participants shared ways of more rapidly identifying best methods for improved follow-up and explored other safety-net tracking systems.

The teams also collaborated with other areas of the ACR, including the Incidental Findings Committee, the Quality and Safety Committee, and the Lung Cancer Screening 2.0 Steering Committee in the Patient- and Family-Centered Care Commission.

“ The goal of our collaboration is relatively simple: decrease the impact of lung cancer on our patients. Many lung cancers are common in younger patients and in non-smokers and, while it is not cost effective to screen these patient populations, another approach to identifying lung cancers early is through the management and monitoring of lung nodules. ”

— Ben Wandtke, MD, MS, Collaborative Leader



Collaborative Leader

Ben Wandtke, MD, MS
Associate Professor
Department of Imaging Sciences,
University of Rochester



Learning Facilitator

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Senior Program Advisor
ACR Quality and Safety Programs

Advisory Committee Members

Tyler Prout, MD, FACR

Kristin Hans, RN

Christopher Moore, MD

Woojin Kim, MD

Stella Kang, MD, MS

Terri Ann DiJulio

**Recommendation
improvement programs
have increased follow-ups
by over 50% and reduced
the number of patients at
risk for delayed diagnoses
by more than**

80%



Recommendations Follow-up
Improvement Collaborative

ACR LEARNING NETWORK

Recommendations Follow-Up Improvement Collaborative Teams

Boston Medical Center | Boston, MA

The Boston Medical Center Department of Radiology serves a wide variety of patients in the Greater Boston Area as the largest safety-net hospital in New England.



Team Leader

Corrin Finnell
Radiology Administrator

Physician Leader

Avneesh Gupta, MD
Radiologist, IT Officer



QI Coach

Mary Thomsen, DNP
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Team Sponsors

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Chief Quality Officer

Jorge Soto, MD
Chair of Radiology

Team Members

Nicholas Cordella, MD
Medical Director of Quality
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Qiyao Zhang, MPH
Manager of Clinical Process
Improvement Analytics



Einstein Healthcare Network | Philadelphia, PA

The Einstein Healthcare Network is a private, not-for-profit organization serving patients in the Greater Philadelphia region.



Team Leader

Meera Kasireddy
Research Coordinator

Physician Leader

Ryan Lee, MD
Chair of Radiology

QI Coach

Anthony Penta
Radiology Supervisor

Team Sponsor

Ryan Lee, MD
Chair of Radiology

Team Members

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Chief Product Officer,
Within Health

Adam Kirell
CEO, Within Health

Nicholas Lim, MD
Radiology Resident Physician

Kareem Malek
Chief Operating Officer,
Within Health

Peter S. Wang, MD
Associate Chair of Informatics



Improvement collaborative team from Einstein Healthcare Network.

“The program’s clear organization and learning materials made it easy to understand and apply new concepts. This program is an amazing opportunity to learn from other organizations and reflect on the quality improvement process at your organization.”

— Meera Kasireddy, Team Leader

Hudson Valley Radiologists, PC | Poughkeepsie, NY

Hudson Valley Radiologists is a private radiology practice serving five hospitals and four outpatient imaging centers in Hudson Valley, New York.



Team Leader

Laurie Wadsworth
Chief Operating Officer



QI Coaches

Wayne Wadsworth
Chief Data Officer



Melissa Xiques
Director of Clinical IT Operations

Team Members

Antonio (Tony) Abbate
Director of Clinical Operations

Donald Lien, MD
Radiologist

Amanda Startup
Clerical Operations Manager/
Navigator

Lisa Szatko
Director of Quality Control
Operations

Jeanine Villano
Director of Clerical Operations

Physician Leader

Benjamin Hentel, MD
Vice President and Director
of Quality

Team Sponsors

Richard Friedland, MD
President

Mitchell Tublin, MD
Executive Vice Chair

Margarita Zuley, MD, FACR
Vice Chair of Quality

“ The collaborative taught us to methodically look at all aspects of the problem. Sharing processes across members of the collaborative helped us address challenges in our own community. In summary, you can’t develop solutions if you haven’t fully defined the problem.”

— Laurie Wadsworth, Team Leader

Radiology Partners | Austin, TX

Austin Radiological Association Diagnostic Imaging (ARA) is a Radiology Partners practice, the largest radiology practice in the United States, serving Austin and Central Texas. ARA has more than 115 radiologists within multiple subspecialties, operating 17 outpatient imaging centers along with imaging services to 22 hospitals and area practices.



Team Leader

Anya Johnson, CAPM
Senior Project Manager, ARA



QI Coach

Maribel Escobar, BS, RT(R)(M)(QM), CPHQ
Director of Operations & Quality/Safety

Team Members

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Rachel McLaughlin
Director of Scheduling, ARA

Patrick Nielsen
Senior Business Analyst, RP

Jennifer Reedy
Technologist, Breast Imaging

Physician Leaders

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MSK Section Chief, ARA

John Kish, MD
CMO, ARA

Process Owner

Amy Shaw
Manager of Pre-Imaging Services, ARA

Team Sponsors

Craig Cunningham
CEO, ARA

Krishna Nallamshetty, MD, FACR
CMO, RP

Elizabeth Stukins
Associate VP Product Development, RP

Joe Verderaime
Associate VP of Product Development, RP

“ Participating in the ACR Learning Network enables you to connect with other groups working toward the same outcome. You must be prepared to tackle challenges, but it’s rewarding to build a stronger team and celebrate the fruits of your labor together.”

— Anya Johnson, Team Leader

The ACR Learning Network builds a culture and a workforce committed to continuous learning and improvement.



Hudson Valley Radiologists team, Poughkeepsie, NY



MRI Technologists from AdventHealth Imaging Center Innovation Tower Orlando, FL

“ We’ve realized that lasting change requires taking a step back, setting aside your assumptions and building from there. Improvement is about figuring out what the root causes are and determining how to build change into your process.”

— Elizabeth Evans, QI Coach, AdventHealth-Central Florida Division



MemorialCare Breast Center team at Long Beach Memorial, Long Beach, CA

“ With multiple cohorts building on what a previous cohort has accomplished, we’re building demonstrated knowledge and strategies for improvement while creating an ongoing community of improvement.”

— Judy Burleson, Project Director, ACR Learning Network

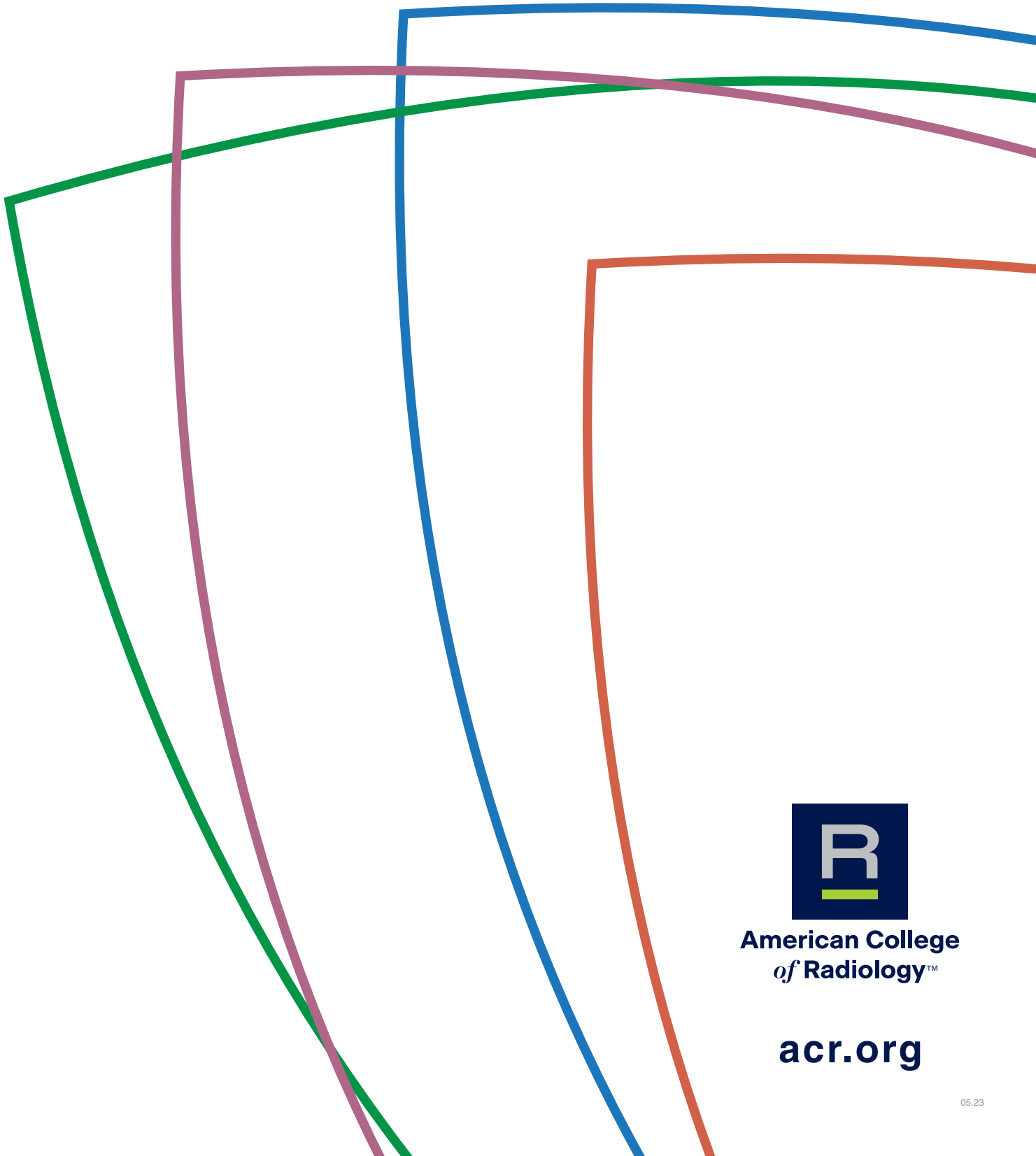


Rose ACR collaborative team, Solis Mammography, Addison, TX



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