15TH ANNIVERSARY

MRQC

MICHIGAN RADIATION ONCOLOGY QUALITY CONSORTIUM



WELCOME

October 30, 2026

TODAY'S AGENDA



Honoring Our Past and Ongoing Partnerships



Consortium Picture



Celebrating Our Progress: State of MROQC



Building Our Future



HONORING OUR PAST AND ONGOING PARTNERSHIPS

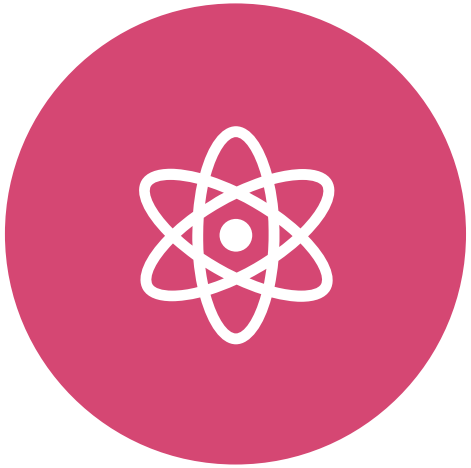
Lori Pierce, MD, FASCO, FASTRO, FAACR
MROQC Director
MROQC Breast Clinical Co-Lead

Thomas Leyden, MBA
Director II, BCBSM Value Partnerships

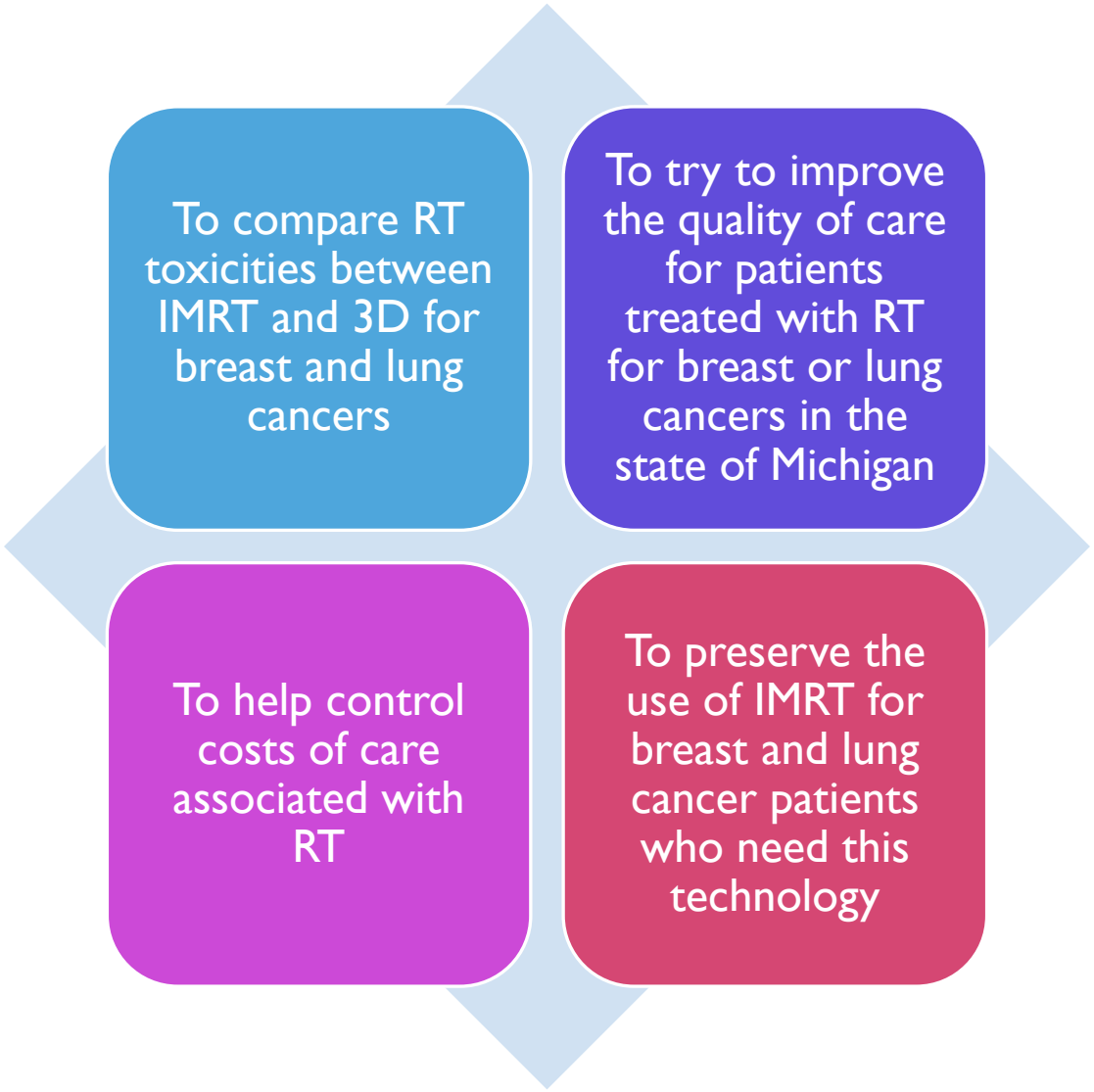
SETTING THE STAGE: WHY MROQC WAS NEEDED



THERAPEUTIC UNCERTAINTY AND RISING COSTS MADE VALUE OF IMRT IN TREATING BREAST AND LUNG CANCERS QUESTIONABLE



INCONSISTENT COVERAGE OF IMRT FOR BREAST AND LUNG CANCERS



WE HAD A UNIQUE OPPORTUNITY!



Advance Patient Care in Radiation Oncology



Reduce Variation



Improve Quality

THE CASE FOR MROQC



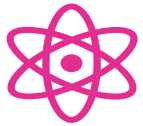
Since 2011, MROQC has been a platform for both comparative effectiveness research and quality improvement.



Our work has allowed us to move the needle in a positive direction with **clinically meaningful endpoints** and our success in breast and lung cancers has allowed us to expand to other clinical indications (prostate cancer and metastatic disease).

WHY MROQC?

MROQC MISSION|VISION|VALUES



Mission

To improve the quality of radiation therapy through patient-centered care



Vision

To expand access to high value care



Values

Patient-centered care
Evidence-based care
Collaboration
Respect



Ongoing Goals:

Deliver equitable care

Standardize treatment planning & delivery techniques

Develop best practices

Guide appropriate use of high-cost technology

Sustained growth

Impact policy

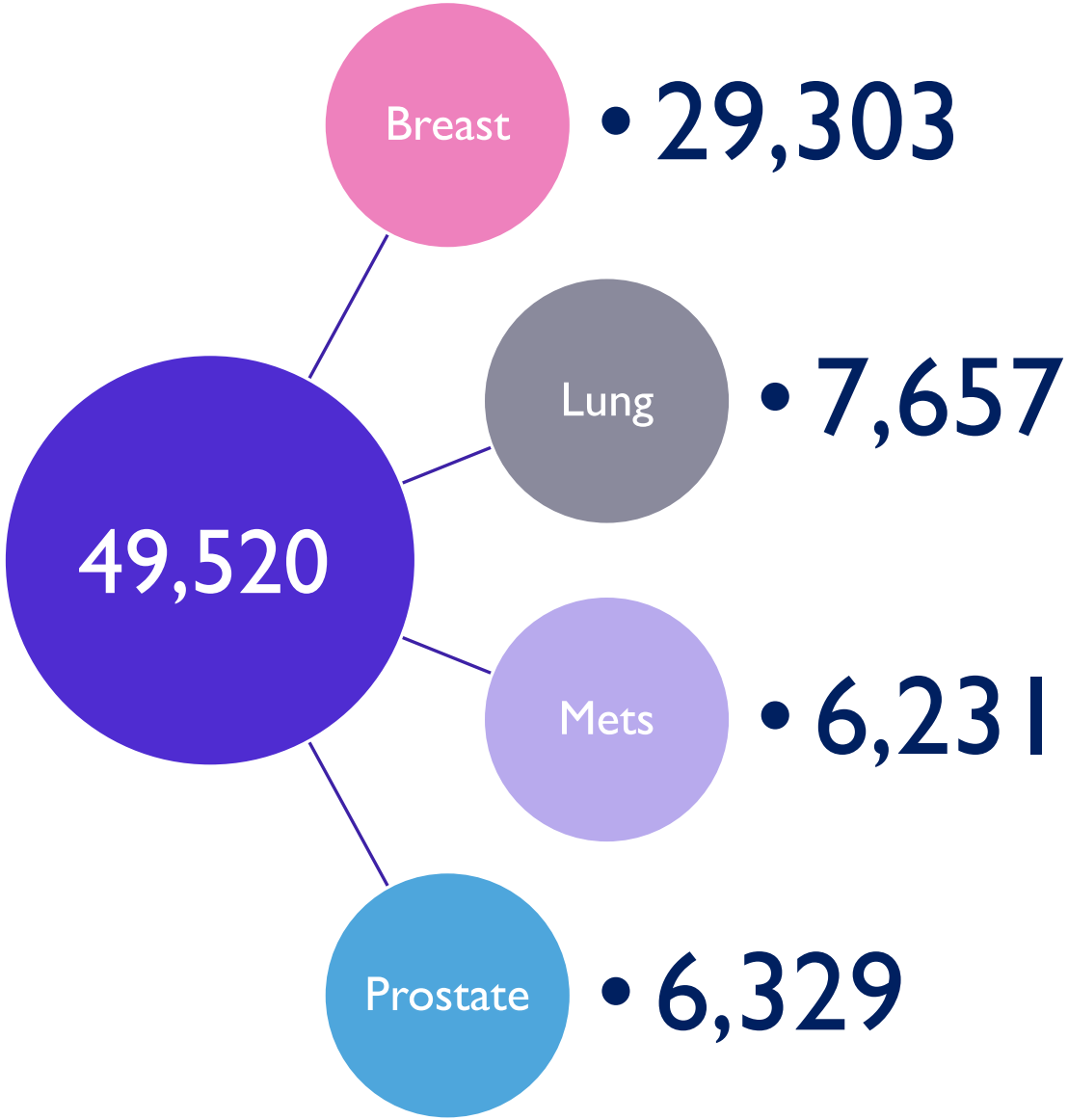
MROQC TODAY

- Brighton Center for Specialty Care-*Brighton*
- Covenant HealthCare-*Saginaw*
- Henry Ford Jackson–*Jackson*
- Henry Ford Macomb Hospital-*Clinton Twp.*
- Henry Ford Providence Hospital–*Southfield & Novi*
- Henry Ford St. John Hospital–*Detroit*
- Henry Ford Warren Hospital–*Warren*
- Genesys Hurley Cancer Institute–*Flint*
- Karmanos Cancer Institute–*Detroit*
- McLaren Bay Region-*Bay City*
- McLaren Central-*Mt. Pleasant*
- McLaren Greater Lansing-*Lansing*
- McLaren Flint–*Flint & Lapeer*

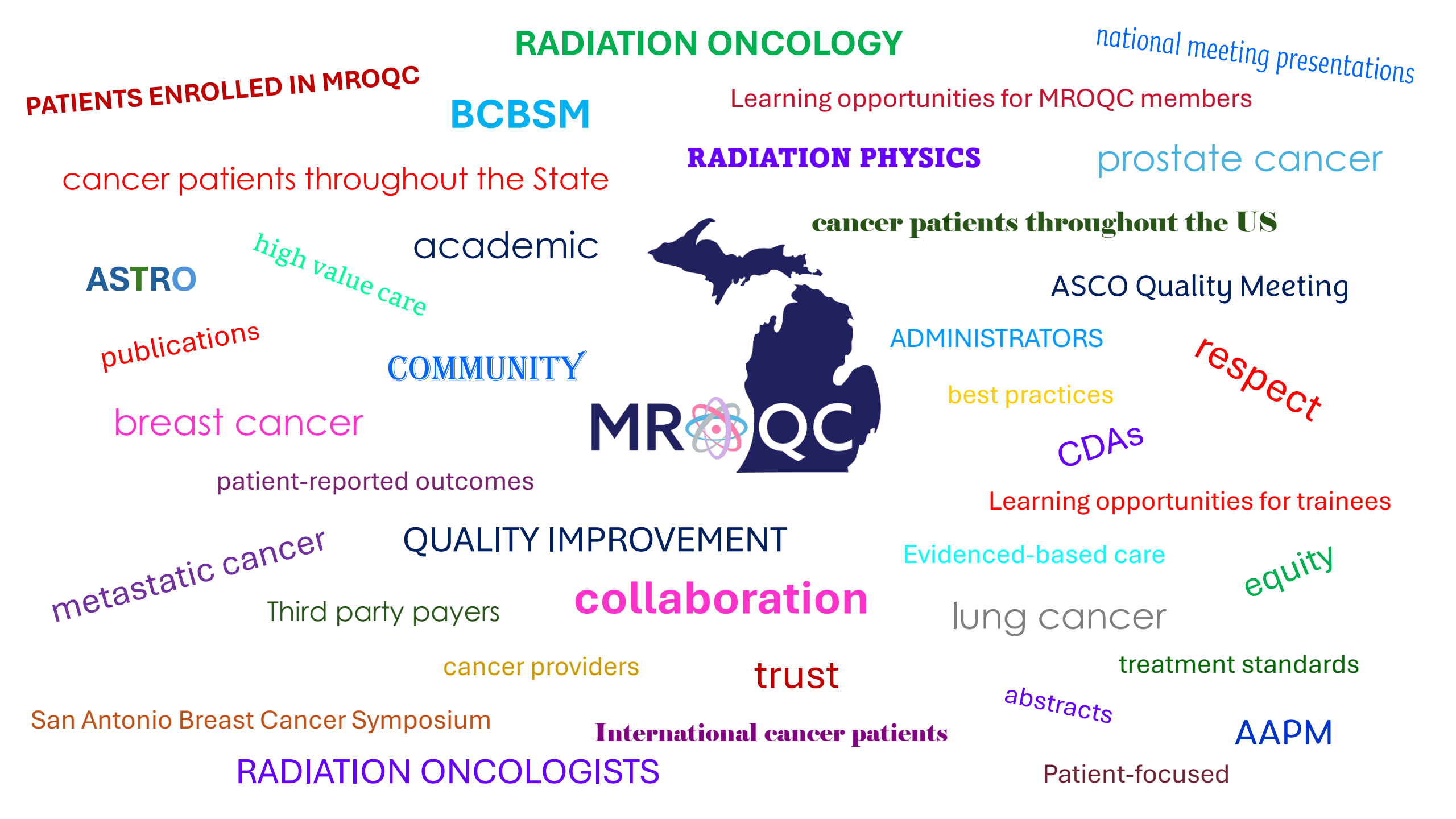


- McLaren Macomb-*Mount Clemens & Clarkston*
- McLaren Northern Hospital–*Petoskey*
- Michigan Health Professionals*(6 locations)*
- Michigan Medicine-*Ann Arbor*
- MyMichigan Medical Center-*Midland*
- MyMichigan Medical Center-*Alpena*
- MyMichigan Medical Center-Saginaw *
- MyMichigan Medical Center-*West Branch* *
- Munson Medical Center–*Traverse City*
- University of Michigan Health-Sparrow–*Lansing*
- Trinity Health Muskegon Hospital-*Muskegon*
- Trinity Health Saint Mary's-*Grand Rapids*
- University of Michigan Health West-*Grand Rapids*
- West Michigan Cancer Center-*Kalamazoo*

MROQC By The Numbers



As of October 19, 2026


RADIATION ONCOLOGY
national meeting presentations
PATIENTS ENROLLED IN MROQC
BCBSM
Learning opportunities for MROQC members
RADIATION PHYSICS
prostate cancer
cancer patients throughout the State
cancer patients throughout the US
academic
high value care
ASTRO
ASCO Quality Meeting
publications
ADMINISTRATORS
respect
COMMUNITY
best practices
breast cancer
CDAs
patient-reported outcomes
Learning opportunities for trainees
QUALITY IMPROVEMENT
metastatic cancer
Evidenced-based care
equity
collaboration
Third party payers
lung cancer
cancer providers
trust
treatment standards
abstracts
San Antonio Breast Cancer Symposium
International cancer patients
AAPM
RADIATION ONCOLOGISTS
Patient-focused

15TH ANNIVERSARY

MRQC

MICHIGAN RADIATION ONCOLOGY QUALITY CONSORTIUM



NOW, A FEW WORDS FROM BCBSM…

CQIs provide an opportunity to change the culture of medical care within Michigan.



Vision

CQIs create a **learning culture** and a **safe environment** for **building trust** and friendships among **competing institutions** and an atmosphere for networking, developing shared goals, and **transforming care delivery.**

Mission

Participating providers **collect**, **share** and **analyze** relevant clinical and/or claims based quality, process, and patient outcomes data, then **implement** and **collaborate** on best practices to **improve patient care.**

Blue Cross Blue Shield of Michigan and Blue Care Network are nonprofit corporations and independent licensees of the Blue Cross Blue Shield Association
Proprietary and confidential

CQIs – Origins



In 1997, the Blue Cross Blue Shield of Michigan Foundation partnered with five hospitals to launch the percutaneous coronary intervention registry, a collaborative effort to improve quality, cost, and outcomes of angioplasty procedures.

The success of BMC2 inspired additional collaborations between Blue Cross, hospitals, and physicians across Michigan, resulting in growth that has led to the premiere program we have today.

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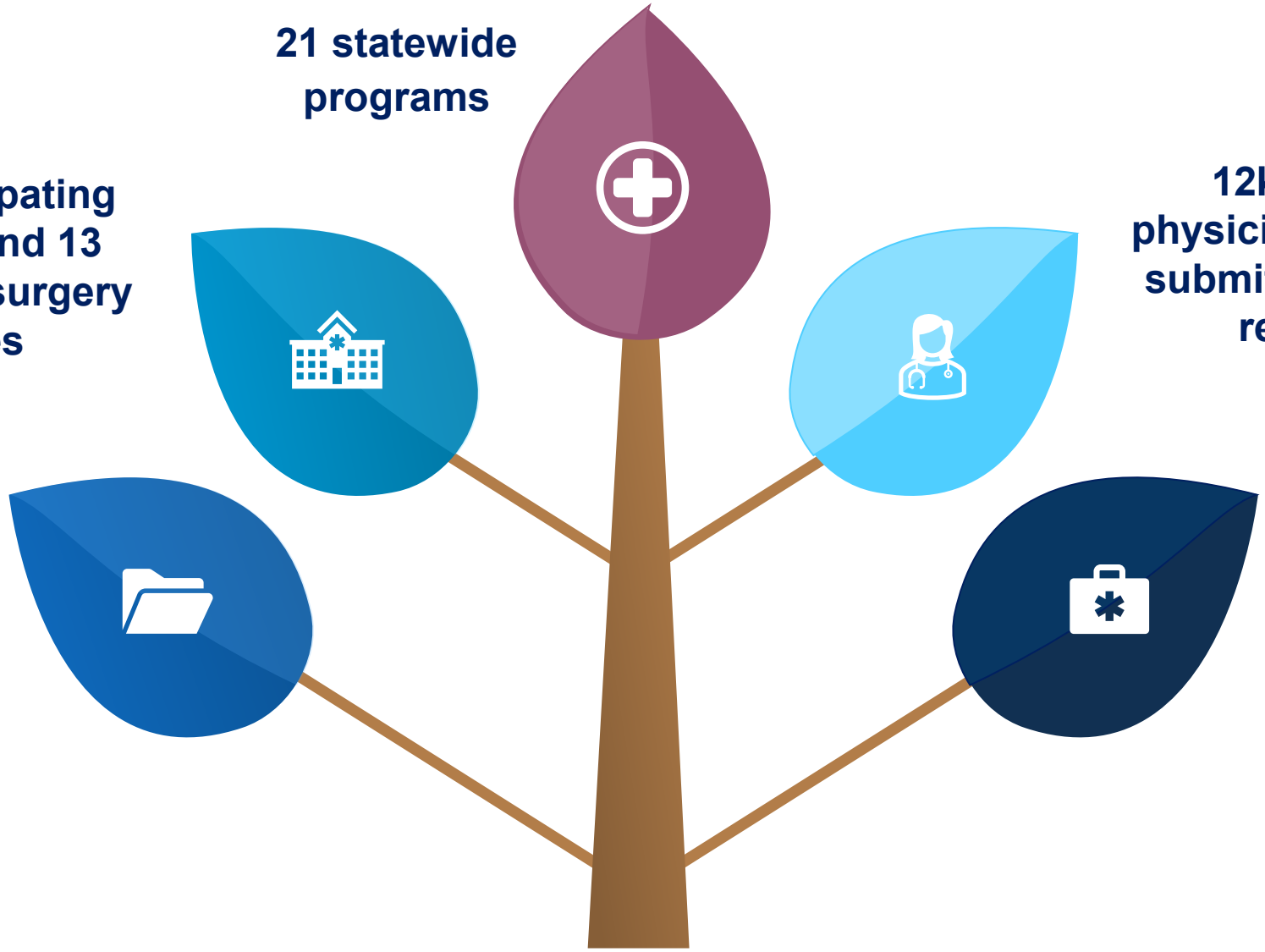
From that one CQI sown, BCBSM and it's collaborative partners have created an internationally recognized award-winning model that improves health care quality and value statewide.

Blue Cross Blue Shield Blue Care Network of Michigan

21 statewide programs

100+ participating hospitals and 13 ambulatory surgery facilities

12k+ unique physicians with data submitted in 26 the registries

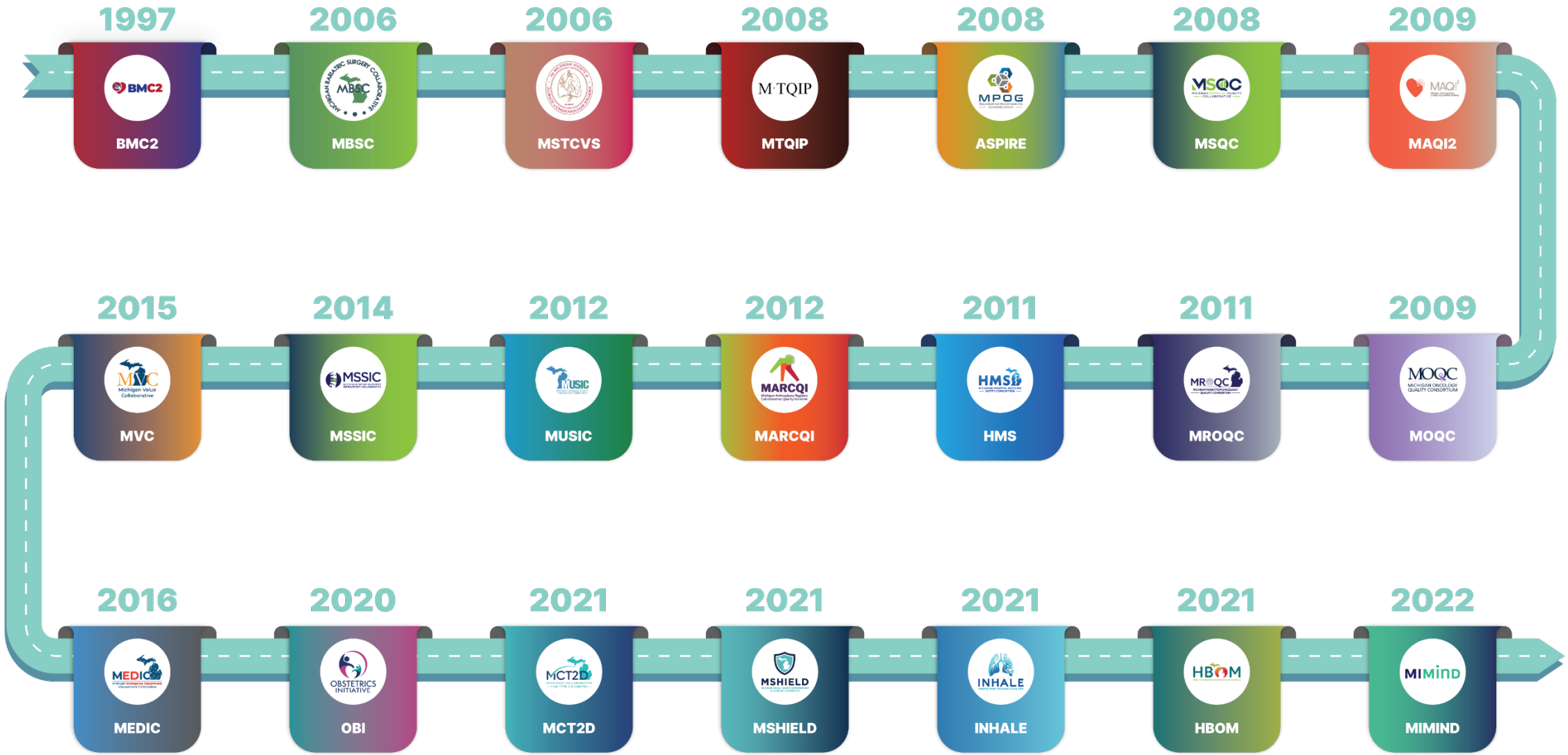


~29M cases collected across all registries; 4M+ cases added to the clinical registries per year

23 (of 36) specialties represented and actively engaged

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Start of the CQIs



★ Most dates based on registry start date.

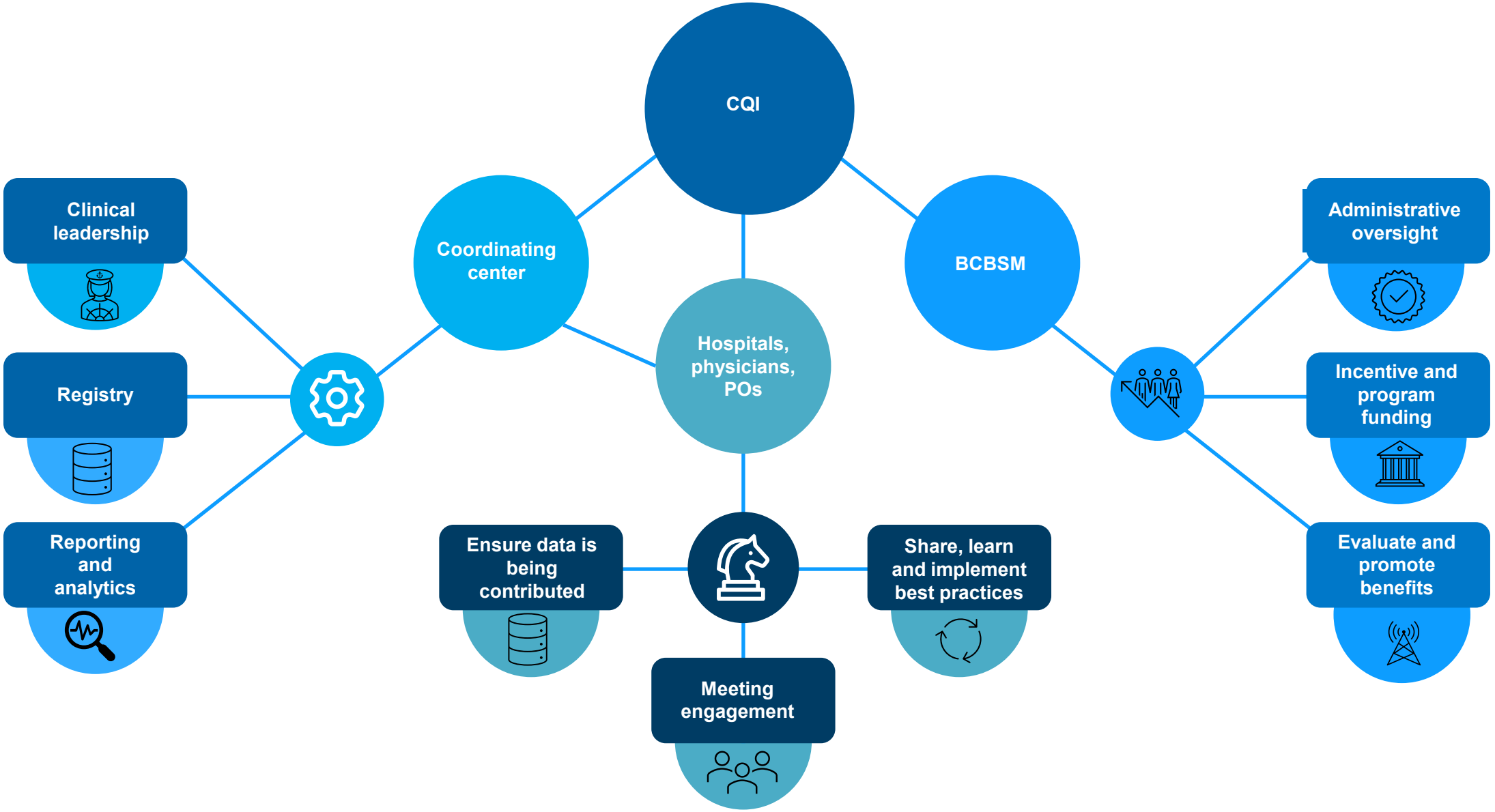
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CQI Portfolio



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CQIs are a collaboration between Blue Cross, the CQI coordinating center and hospital, physician and physician organization participants.



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The Collaborative Quality Initiatives directly benefit BCBSM's members.

Blue Cross Blue Shield Blue Care Network of Michigan

Collaborative Quality Initiatives



Improves cost and helps keep care more affordable

Reduces complications (up to and including death), decreases length of stay, and gets employees back to work more quickly

Addresses appropriateness of care (in certain instances) and increasingly engage patients in active decision making

Allows BCBSM to make value-based payments to high performing providers and institutions based on meaningful clinical data

Helps BCBSM address new technologies where ideal care is not known and possibilities for overuse exist

Allows BCBSM to collaborate with providers on shared quality goals versus traditional fee-for-service

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CQIs by the numbers



$4.1 billion saved in estimated statewide health care costs, due to decreased complications and improved patient outcomes.



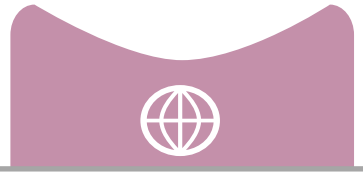
Thousands of partnerships with health systems, hospitals, alternate sites of care, physician organizations, physicians and more.



1500+ scholarly publications in leading clinical journals on CQI best practices and results. 201 articles published in 2025.



400+ patient and provider resources created by CQIs; majority are made available to larger provider community via internet access.



CQI program has immense profile haven been presented worldwide:

- On **six continents in 53 countries** (to date).

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MROQC Incentive Programs through Partnership with BCBSM

Blue Cross Blue Shield Blue Care Network of Michigan

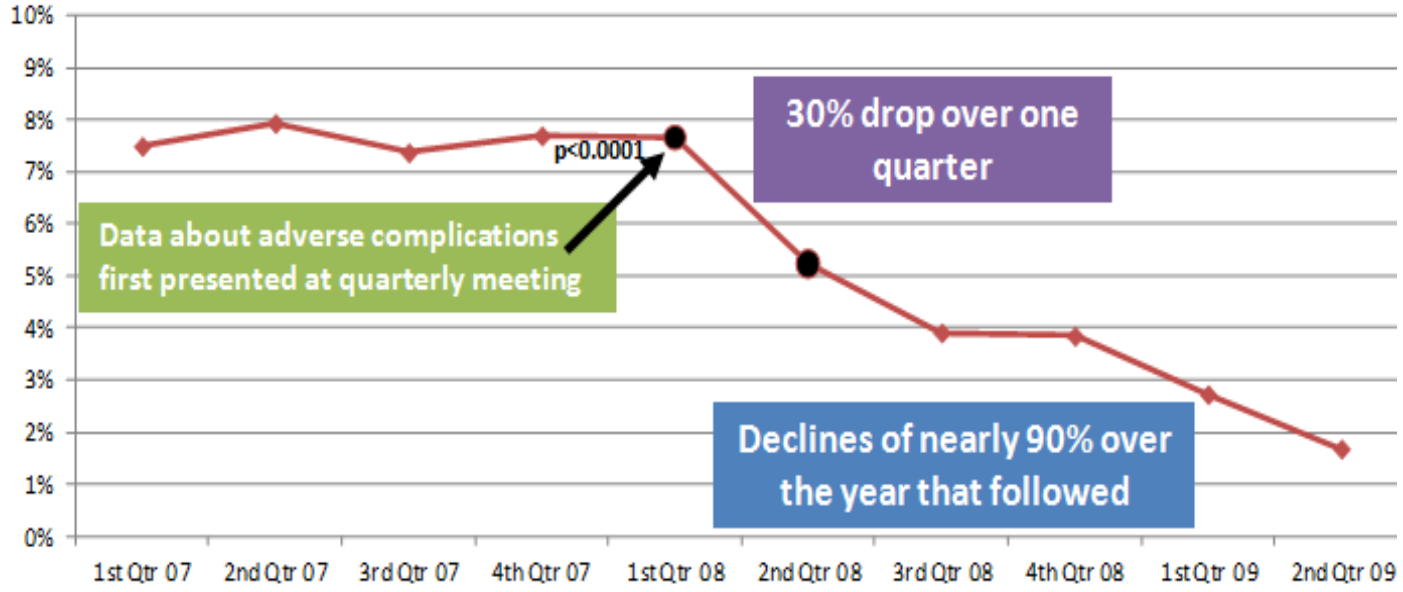
Pay for Performance (P4P)	Performance-based rewards for hospitals
Participation Payment	Abstraction Support
CQI VBR	Boosted reimbursement for physicians
Gold Card	Prior auth auto-approval

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Best practices discovered in Michigan routinely spread across the country, changing practices nationally and internationally in many cases.

Blue Cross Blue Shield Blue Care Network of Michigan

Use of IVC filter in 20 Michigan hospitals participating in MBSC



The bariatric collaborative was able to **decrease the use** of IVC filters **by nearly 90% in one year's time**.

In the time since the best practice was determined:

3,464 Michigan patients did not receive an IVC filter

Every year, 433 Michiganders:

- Avoid a procedure
- Spend less time in the hospital
- Have a reduced risk of death or a dangerous event from a blood clot

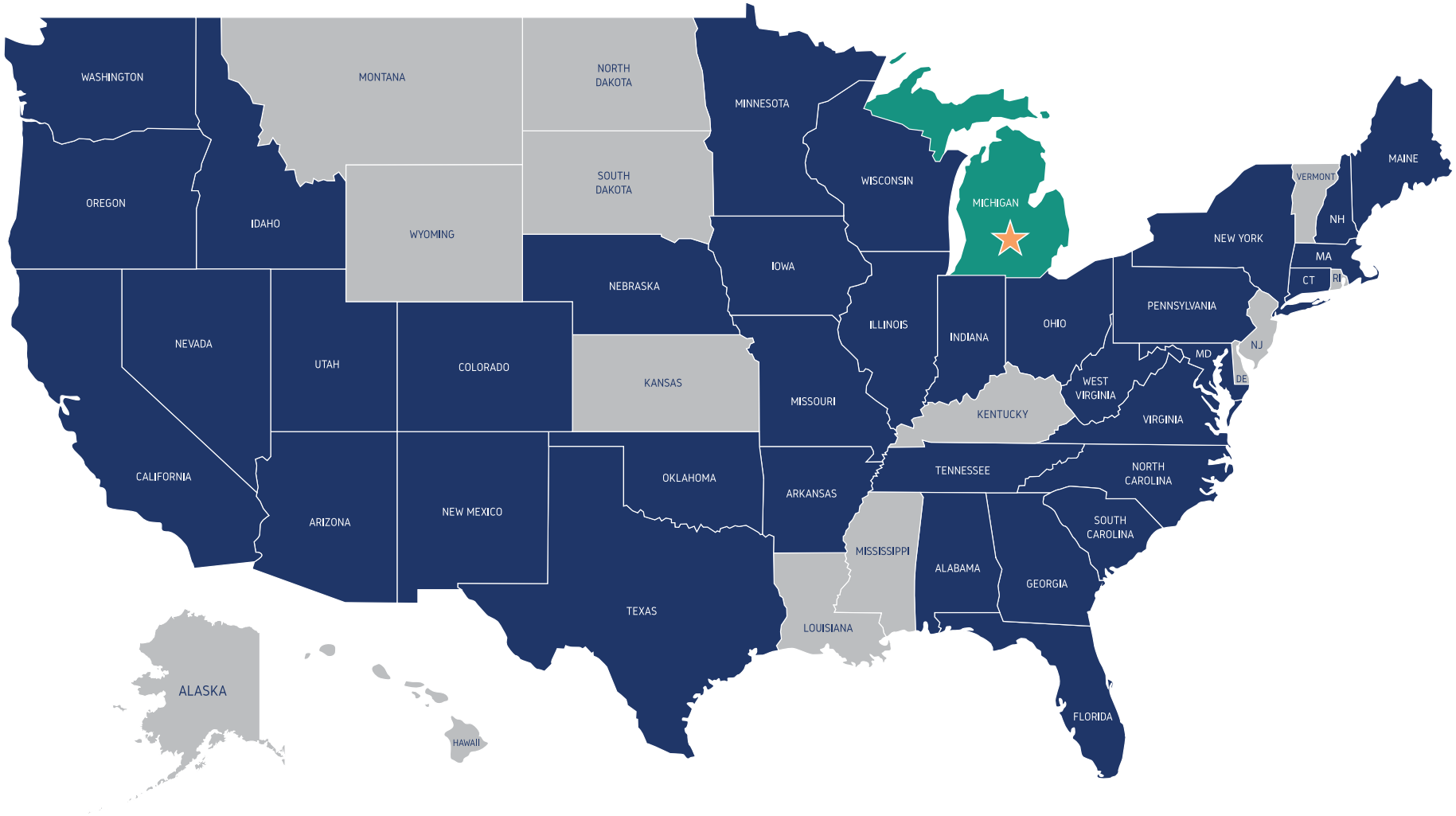
- ✓ **Typical quality improvement takes ~15 years to incorporate. In Michigan this finding changed practice in less than one year**
- ✓ **IVC use in bariatric surgery is down to 1% nationally and 0% in Michigan**

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Clinical collaborations across the U.S.

From Michigan to 36 other states, CQI partnerships are across the country.

Examples include health systems partnering as collaborating sites, contributing to registry data, and implementing CQI initiatives, toolkits and other resources into practice.



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CQI programs & their findings have a broad, international reach.

Blue Cross Blue Shield Blue Care Network of Michigan

BCBSM is the only US health plan that has had its programs profiled on six continents in 53 countries.



Argentina, Algeria, Australia, Austria, Bangladesh, Bhutan, Brazil, Canada, Chile, China
Colombia, Costa Rica, Denmark, Egypt, England, France, Germany, Iceland, India, Indonesia
Israel, Ireland, Italy, Japan, Jamaica, Jordan, Lebanon, Malaysia, Mexico, Nepal
Netherlands, New Zealand, Nigeria, Norway, Pakistan, Philippines, Portugal, Qatar, Saudi Arabia, Scotland
Slovenia, Spain, Sri Lanka, Sudan, Sweden, Switzerland, S.Korea, Taiwan, Thailand, Turkey
Ukraine, United Arab Emirates, Wales

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The CQIs are a win.





Blue Cross Blue Shield Blue Care Network of Michigan

Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association

They are a win for those who seek care, because they receive better care.

They are a win for those who provide care, because they are afforded the opportunity to continuously improve.

They are a win for those who pay for care, because they reduce costs, improve patient care, and strengthen the physician/insurer relationship.

BRINGING IT TOGETHER



Collaboration Works: MROQC unites academic and community practices statewide under a shared mission.



From Data to Impact: Real-world outcomes show rapid improvements — lowering cardiac dose, improving ADT utilization, raising MRI adoption, and more.



Value for Everyone: Patients receive better care, clinicians gain support and recognition, and payers see meaningful value.



Beyond Michigan: MROQC's successes shape national guidelines and demonstrate the power of the CQI model.

BRINGING IT TOGETHER

Collaboration Works: MROQC unites academic and community practices statewide under a shared

From Data to Impact: Real-world outcomes show rapid improvements — lowering cardiac

👉 Together, we're proving that provider and payer collaboration = better radiation oncology outcomes for all.

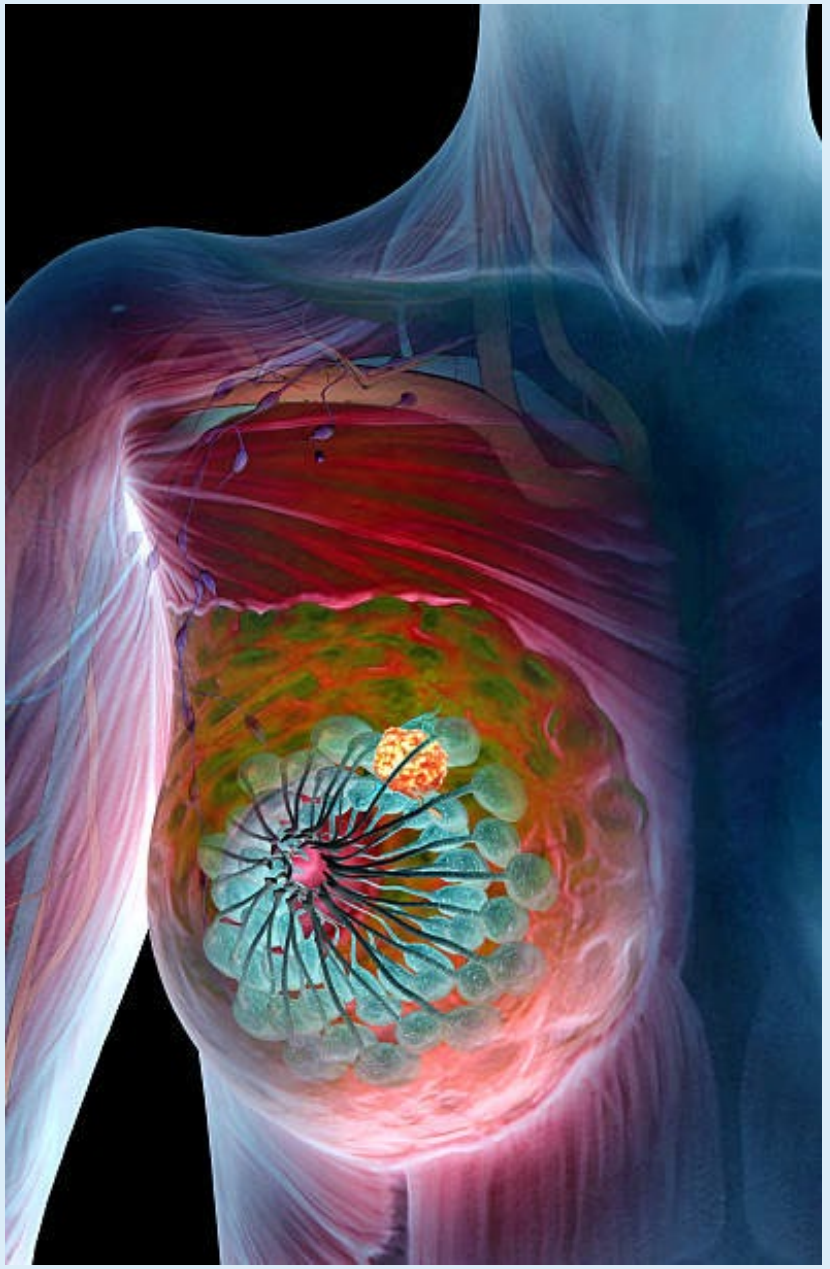
support and recognition, and payers see meaningful value.

and demonstrate the power of the CQI model.

Celebrating 15 Years of MROQC

Breast Working Group

Where MROQC began, 2011–2027



MROQC
BREAST WORKING GROUP

15 Years at a Glance

29,303

breast patients enrolled since 2012

27

facilities enrolling patients in 2026

15

breast manuscripts published

98%

AWBI use in appropriate patients

≤1 Gy

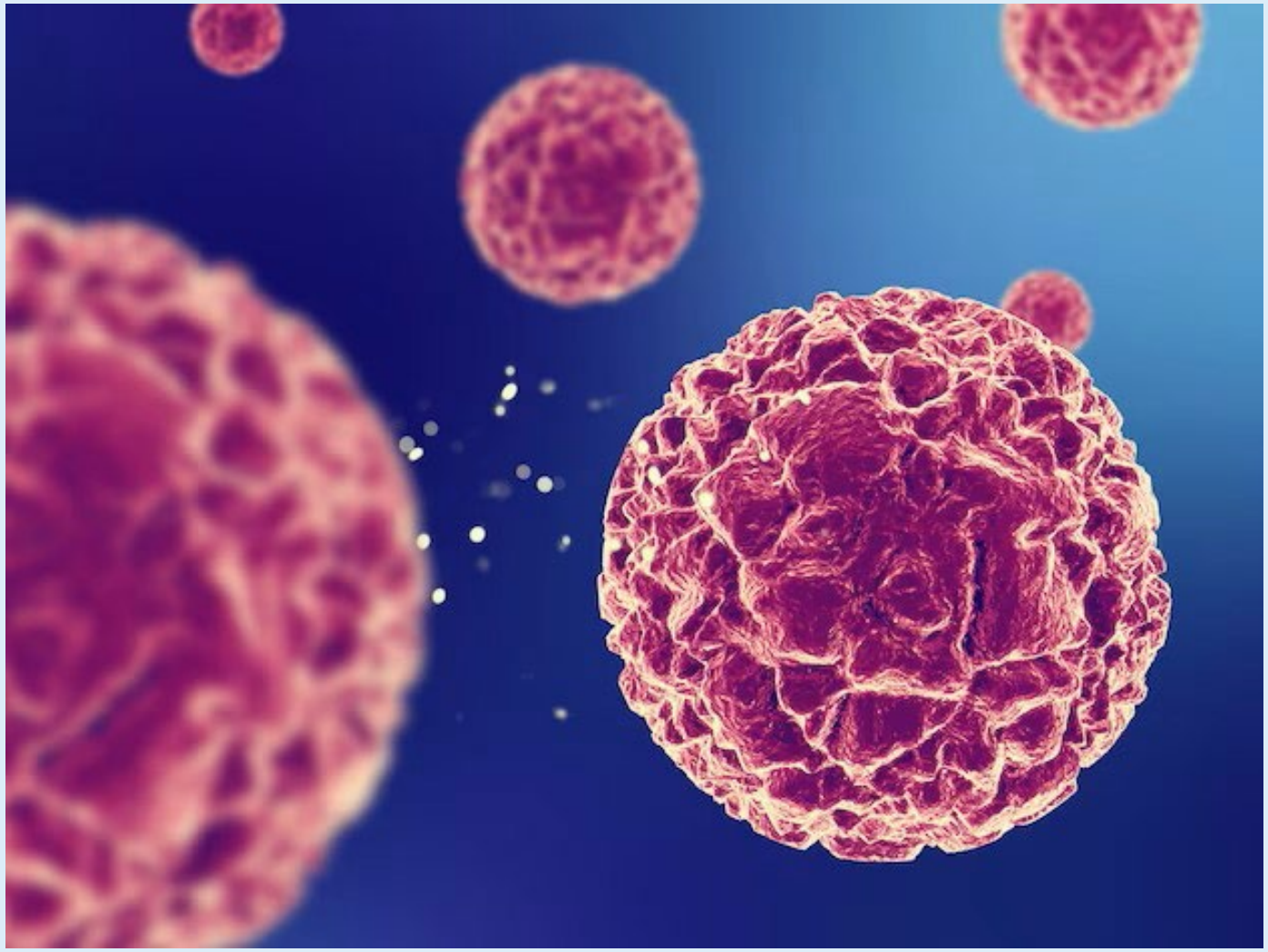
mean heart dose goal for node-negative patients

53%

of eligible patients treated prone in 2026

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Looking Back



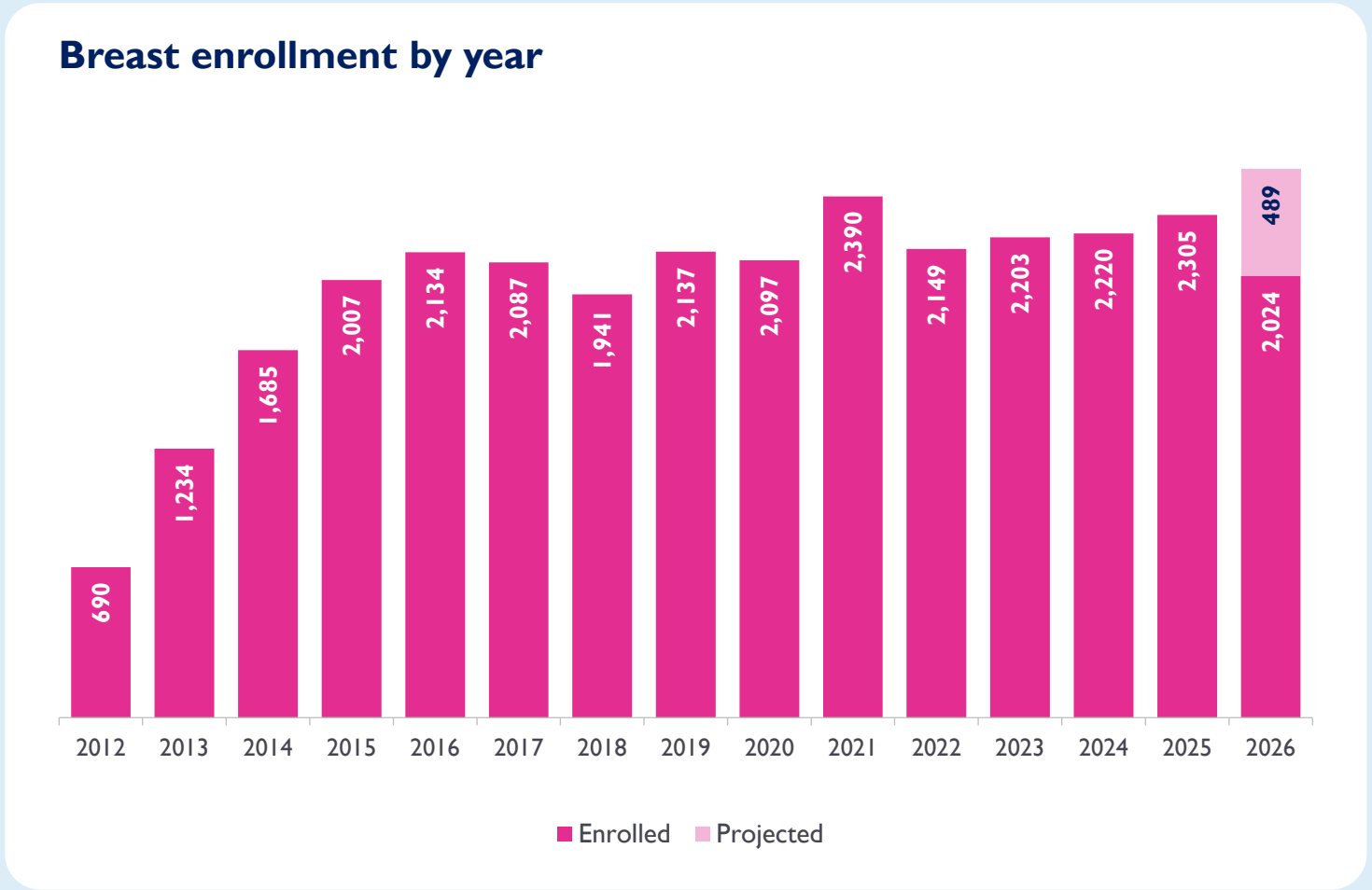
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15 Years of Breast Measures

2012–13	Clinical (2012) and physics (2013) data collection launch; heart dose tracking begins
2014	>95% heart contoured and DVH submitted
2015	Heart DVH submitted (95%) and use of AWBI (50%)
2016–17	Mean heart dose ≤2 Gy (90%) and use of AWBI (80%)
2018	Mean heart dose (90%), AWBI (85%) and PTV expansion drawn (50%)
2019	Mean heart (75%), AWBI per 2018 guidelines (80%) and TG-263 (50%)
2020	Mean heart (85%), TG-263 (80%) and omission of breast boost (≤30%)
2021	PTV coverage and heart dose (85%), boost omission and node-positive mean heart (≥85%)
2022	RNI Roadmap Year 1 (≥60%) and PTV coverage and heart dose (≥80%)
2023	RNI Roadmap Year 2 (≥60%) and node-positive mean heart (≥85%)
2024	RNI Roadmap Year 3 (≥70%)
2025–26	Prone treatment (≥30%, then ≥40%) and lymphedema measurements (≥50%)
2027	Facility-level prone (≥20%), lymphedema continues and PMRT data collection begins

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Nearly 30,000 Patients



29,303

patients enrolled over 15 years

~2,150

patients a year on average since 2015

Early 2027

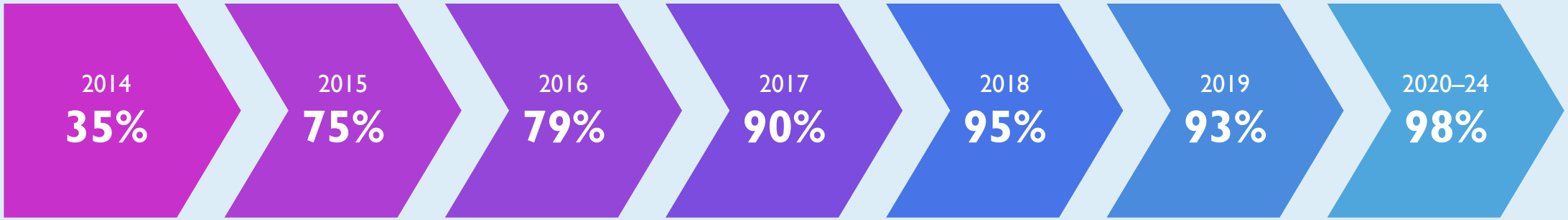
expected date of our 30,000th patient

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Source: Breast enrollment data as of 10/19/2026. 2026 = 2,024 enrolled to date + 489 projected (~2,500 for the year). 30,000 date projected at ~200 patients/month.

Hypofractionation: From 35% to 98%

BASELINE **ACTIVE MEASURE** **MAINTENANCE**



MROQC data cited in the 2018 ASTRO guidelines

Our data informed the development of the national Accelerated Whole Breast Irradiation guideline

Ahead of the nation

U.S. hypofractionation rose from ~20% (2012) to ~80% (2018); MROQC passed 95% in 2018

Published along the way

Early papers on who receives hypofractionation (2014) and acute toxicity by schedule (2015, JAMA Oncology)

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Sources: MROQC ASTRO education slides (use of AWBI in appropriate patients); Parikh, et al. JAMA Oncol.; 2020; 6(6):839-846.

Driving Down Cardiac Dose Since 2012

Node-negative patients

2012

MROQC begins tracking heart dose

2013–2015

Median mean heart dose reduced from ~2.2 Gy to ~1.6 Gy

2016–2017

Heart dose goal ≤2 Gy

2018–2020

Heart dose goal tightened to ≤1.2 Gy

2021

Goal ≤1 Gy with PTV coverage ≥95%; >90% compliance

On the horizon: exploring cardiac substructure metrics (e.g., coronary arteries)

~27%

lower median mean heart dose, node-negative, 2013–2015

Our heart dose publications

2017 **Pierce et al.**
Time trends and predictors of heart dose (Red Journal)

2022 **Chapman et al.**
Mediators of racial disparities in heart dose (JNCI)

2023 **Herr et al.**
Cardiac dose reduction after hypofractionation (Red Journal)

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Source: Herr, et al. Int J Radiat Oncol Biol Phys (node-negative patients). ~27% = (2.2 − 1.6) / 2.2, from approximate medians.

Breast Boost Omission, 2020–2022

The measure
Boost in ≤30% of women 70+ with early-stage disease

Who qualified
70+, ER+, T1N0, grade 1–2, margins ≥2 mm

57% → 25%

boost use, baseline to achieved

Less overtreatment of low-risk patients, to limit fibrosis and cosmetic impact while preserving outcomes

Still learning

2026: Dykstra et al. on acute toxicity and cosmesis after a tumor bed boost with hypofractionation (Red Journal)

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Regional Nodal Irradiation Roadmap

Year 1 (2022) Target ≥60%

Naming: node-positive patients treated to regional fields, nodal groups contoured and named per TG-263

Dose: contour quality

Training: supraclavicular and infraclavicular nodes

Year 2 (2023) Target ≥60%

Naming: unchanged

Dose: dose to treated supraclavicular and infraclavicular nodes reported

Training: axilla and IMN nodes

Year 3 (2024) Target ≥70%

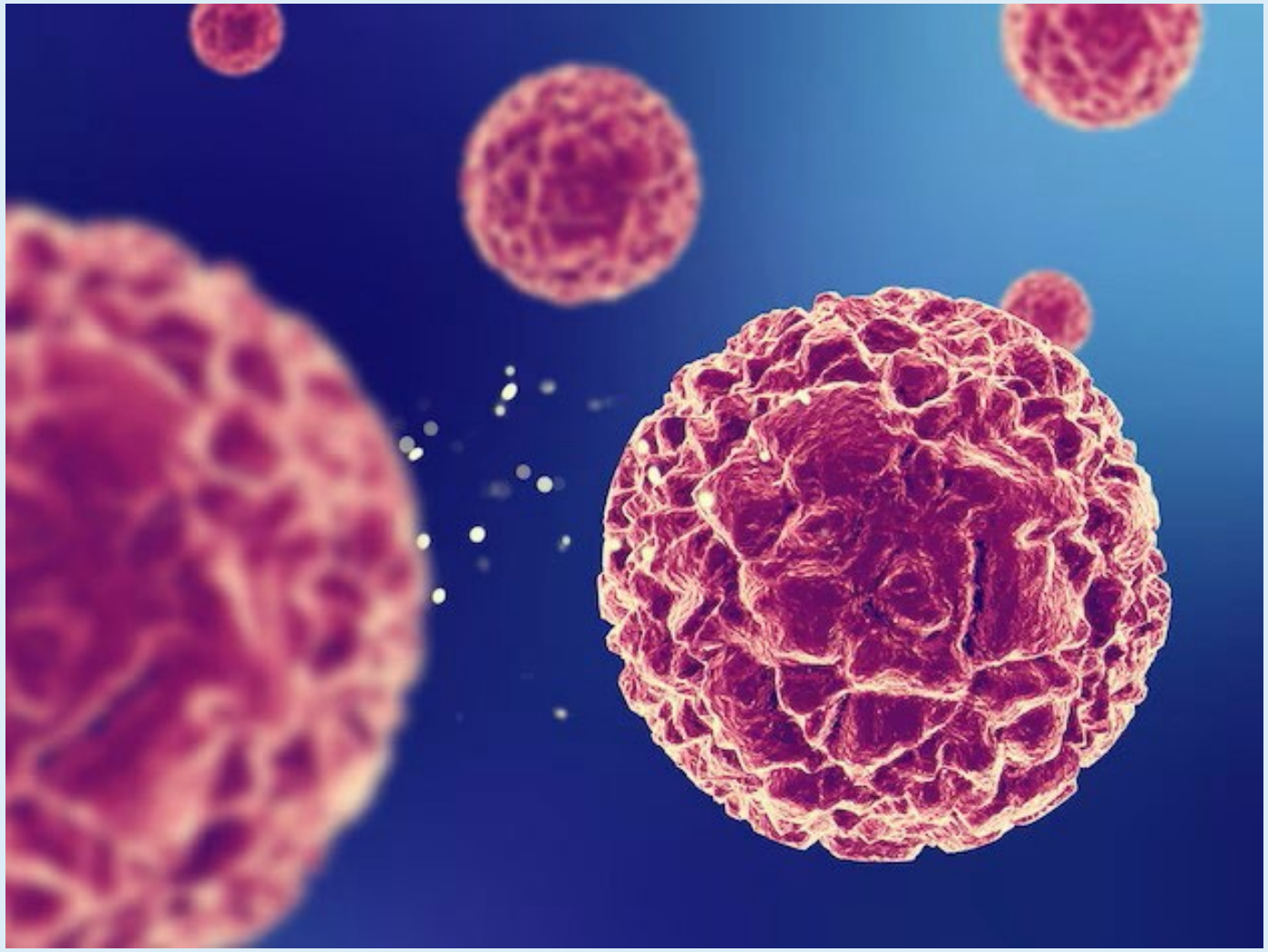
Naming: unchanged

Dose: dose to treated SCV/ICV, axilla and/or IMN reported

The legacy: TG-263 naming and nodal dose reporting are now part of the lymphedema measure

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Where We Are Today



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2026 Breast Quality Initiatives

Prone Positioning

Collaborative-wide, eligible patients

FULL-POINTS TARGET	2026 RESULT
≥40%	53%

387 of 732 eligible patients treated prone

Lymphedema

Arm measurements, node-positive RT

PART A: FOLLOW-UP	PART B: BASELINE
95%	88%

Target ≥50% for each part; 21 of 26 facilities met both

Source: 2026 Breast Quality Measures Report, refreshed 10/1/2026 (RT start 1/1–9/30/2026). Lymphedema rates pooled from facility counts (A: 147/154; B: 112/127).

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15 Breast Manuscripts and Counting

2026 Adoption of TG-263 nomenclature for breast RT
Moncion et al. · PRO

2026 Tumor bed boost after hypofractionation
Dykstra et al. · Red Journal

2024 Acute toxicities with hypofractionation
Beydoun et al. · Red Journal

2023 Cardiac dose reduction after hypofractionated RT
Herr et al. · Red Journal

2022 Mediators of racial disparities in heart dose
Chapman et al. · JNCI

2022 Near-surface dose accuracy across WBI techniques
Moncion et al. · PRO

2021 Chemotherapy and whole breast RT outcomes
Dilworth et al. · Red Journal

2021 3D-conformal RT versus IMRT
Jagsi et al. · Red Journal

2021 Hypofractionation in triple-negative breast cancer
Jagsi et al. · Red Journal

2020 Illustrated scale for acute radiation dermatitis
Shumway et al. · PRO

2020 Racial disparities in hypofractionation use
Laucis et al. · Red Journal

2020 Improving patients' experiences of acute toxicity
Jagsi et al. · JCO

2017 Time trends and predictors of heart dose
Pierce et al. · Red Journal

2015 Acute toxic effects by fractionation schedule
Jagsi et al. · JAMA Oncology

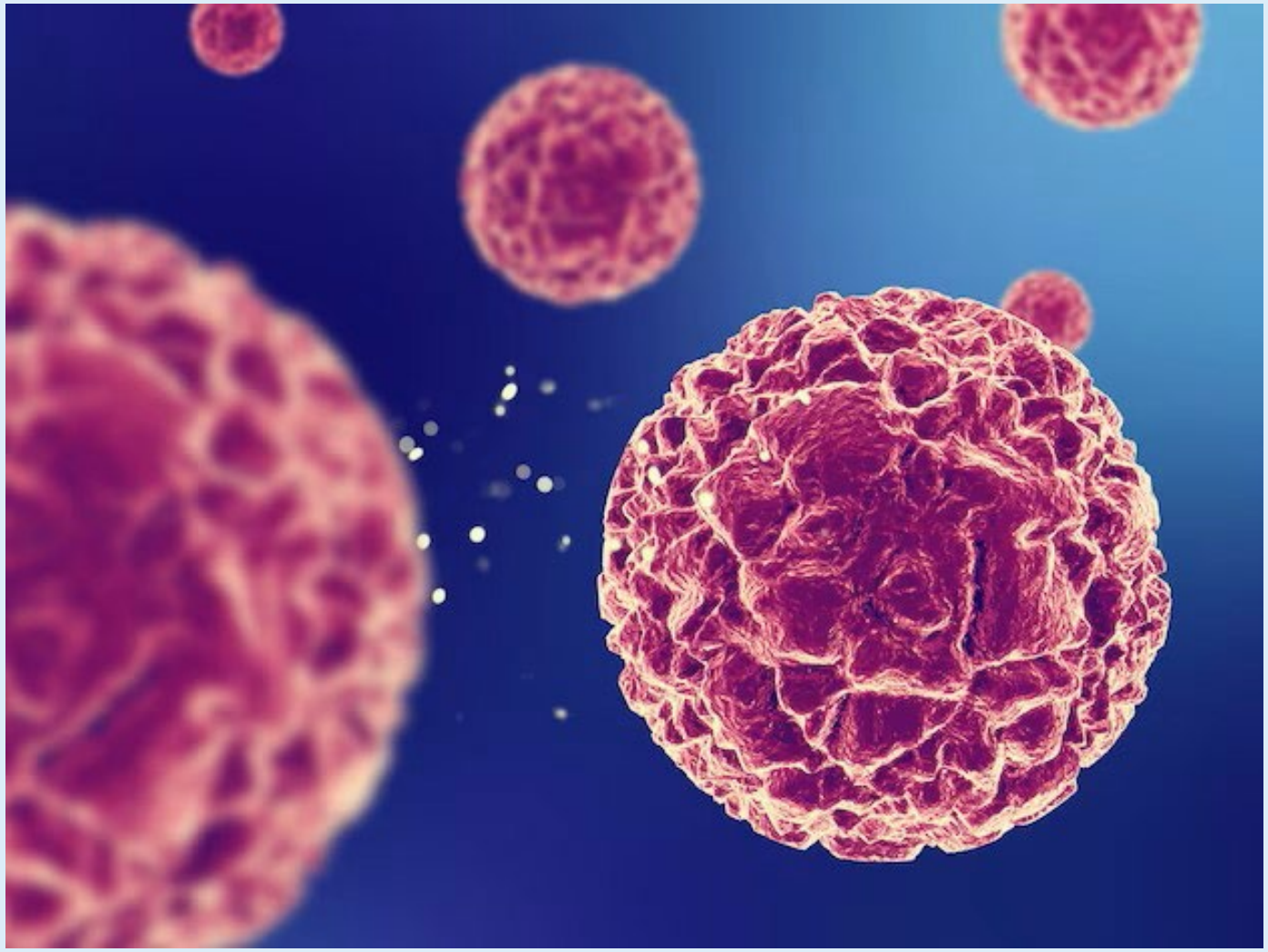
2014 "Choosing Wisely?" Patterns of hypofractionation use
Jagsi et al. · Red Journal

Coming in December: 2 abstracts at SABCS 2026

Sources: mroqc.org/manuscripts; Moncion 2022 and 2026 (PRO). Plus 2 MROQC-wide papers (Jagsi 2021; Moran 2016). Red Journal = Int J Radiat Oncol Biol Phys.

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Where We're Headed



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The Next Chapter

Facility-level prone

2027 measure: full points at ≥20% treated prone

PMRT data

Post-mastectomy RT data collection begins in 2027

Approved project

Toxicity and cosmesis after neoadjuvant chemotherapy: assessment by fractionation

SABCS 2026

Two breast abstracts in San Antonio this December

Lymphedema

Measure continues, with standardized measurement education

Long-term follow-up

Pilot: can we abstract 10-year post-RT outcomes?

30,000 patients

Milestone expected in early 2027

Here's to the
next 15 years

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Patient Education at Every Step



Before RT
Video 1: Preparing for radiotherapy

During RT
Video 2: Caring for yourself during treatment

After RT
Video 3: Life after radiation

Linked to our lymphedema work: helping patients understand arm care and measurements from the start

Featured clip from Video 3: After RT
Theresa Courter, OTR/L, CLT, Cancer Rehabilitation Specialist

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Video 1: Before Radiation

VIDEO 1 OF 3

Before RT

Preparing for Breast Radiation Therapy

KEY MESSAGE

Follow your care team, care for your skin, stretch, stay active and watch for new swelling.

Treatment position

Arms rest overhead for treatment; gentle stretches help with post-surgery tightness

Scar care

Gentle scar massage once the incision is fully healed; check before trying new tools

Skin care

Clean, moisturized skin with fragrance-free products, plus plenty of water

Breathing & relaxation

Diaphragmatic breathing, five counts in and out, to relax and gently stretch the chest

Lymphedema awareness

Early signs, personal risk factors and when to tell the care team about new swelling

Exercise & strength

Start slowly and build toward 150 minutes of activity and 2 strength sessions a week

Source: MROQC breast patient education video script (Theresa Courter, OTR/L, CLT). Pink = connects to our lymphedema measure.

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Video 2: During Radiation

VIDEO 2 OF 3

During RT

Caring for Yourself During Breast Radiation Therapy

KEY MESSAGE

Moisturize · Move · Breathe · Rest · Nourish

Skin care

Moisturize about 3 times a day, pat dry, wear soft clothing, avoid sun

Scar care & swelling

No massage on irritated skin; report swelling that isn't improving

Breathing & relaxation

Diaphragmatic breathing, mindfulness and support for anxiety or low mood

Keep moving

Exercise is encouraged: gentle stretches and building toward 150 minutes a week

Rest & sleep

Balance activity with rest and aim for 7–8 hours of sleep with good sleep habits

Nutrition & fluids

Protein-rich foods, variety and about 8–10 cups of fluids a day

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Source: MROQC breast patient education video script (Theresa Courter, OTR/L, CLT). Pink = connects to our lymphedema measure.

Video 3: After Radiation

VIDEO 3 OF 3

After RT

Life After Breast Radiation Therapy

KEY MESSAGE

Recovery looks different for everyone: keep moving, progress gradually and ask for help early.

Skin & tissue changes

Skin keeps healing; report warmth, fever, open skin or worsening pain

Fibrosis & cording

Tightness, firmness or cords can limit motion and are best treated early

Swelling & lymphedema

Swelling should ease in 4–5 weeks; get persistent swelling checked

Compression garments

Not everyone needs one; if recommended, have it professionally fitted

Movement & exercise

Keep building toward 150–300 minutes a week plus strength training twice a week

When to ask for help

A wide team can help, from rehab and lymphedema therapists to dietitians

Source: MROQC breast patient education video script (Theresa Courter, OTR/L, CLT). Pink = connects to our lymphedema measure.

MROQC
BREAST WORKING GROUP

Thank You, Breast Working Group

Our patients

Nearly 30,000 people whose care and outcomes made this work possible

Facility teams

Physicians, physicists, dosimetrists, nurses and data abstractors at 27 sites enrolling in 2026

Working group members

Who chose the measures, reviewed the data and shared what we learned

Coordinating Center

Who keep the data, reports and projects moving

15

years of breast quality improvement

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Celebrating 15 Years of MROQC Lung

2011 – 2027

Lung Quality Improvement Working Group



MROQC
LUNG WORKING GROUP

Today's Agenda



OUR 15-YEAR JOURNEY



SHARING WHAT WE'VE LEARNED



WHAT'S NEXT: THE LUNG APP

Our 15-Year Journey



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15 Years by the Numbers

15

years of collaborative lung quality improvement

7,655

lung patients enrolled through Oct 2026

27

facilities enrolling patients in 2026

10

lung quality measures launched since 2014

14

peer-reviewed lung publications

Built together by our member facilities, physicians, physicists, dosimetrists, abstractors and partners.

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Enrollment data as of 10/16/2026.

Growing Together: Lung Enrollment by Year



5×

growth in annual enrollment

154 patients in 2012 → 754 in 2025

605 enrolled in 2026 so far, with 757 projected for the full year

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2026 is year to date. Source: 2026 Lung Enrollment Monthly Report, data as of 10/16/2026.

A Decade of Lung Quality Measures

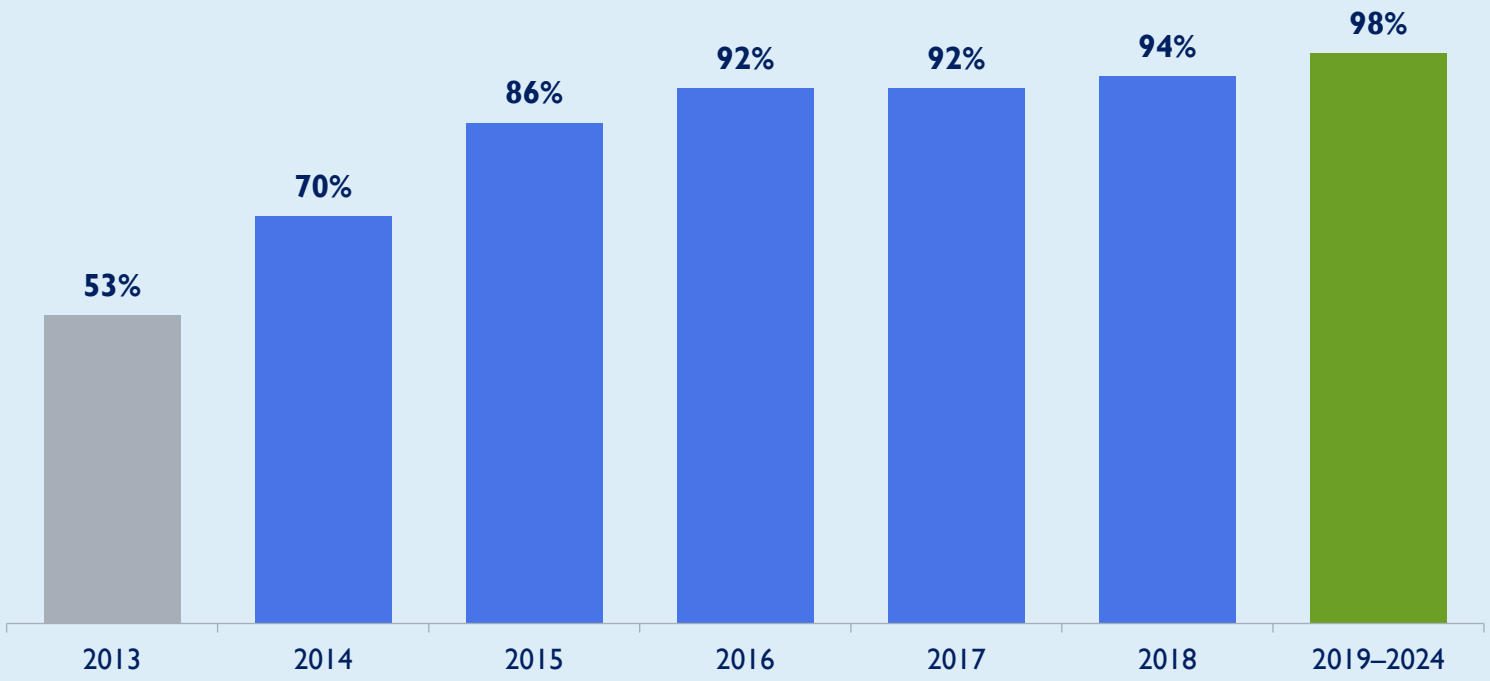
2014 – 2016	Motion Management (>85%)		
2017 – 2018	Motion Management cont. (>90%)	Lung GTV Defined (>80%)	Lung PTV Defined (>80%)
2019 – 2021	Target Coverage & Heart Dose (≥65%)	Collaborative-wide TG-263 Breast & Lung (50%)	
2022 – 2023	Target Coverage & Heart Dose cont. (65%)	TG-263 cont. (80%)	Annual Follow-Up (75%)
2024 – 2025	Esophageal Dose (65%)	Paddick Conformity Index for SBRT (80%)	
2026 – 2027	Hypofractionation Guidelines (≥75%, collaborative-wide)	NEW 2027: Rib & Chest Wall Toxicity Assessment (≥70%)	

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Target goal for each measure shown in parentheses.

Motion Management: From 53% to 98%

Percentage of lung patients who underwent a form of respiratory motion assessment at the time of simulation



BALANCE

2013 · Baseline before the measure: 53%

ACTIVE MEASURE

2014–2018 · Targets of >85%, then >90%

MAINTENANCE

2019–2024 · Sustained at 98% across the collaborative

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Matuszak, et al. Practical Radiation Oncology; 2017; 8(4):e208 – e211.

Turning Evidence into Rapid Improvement

2017

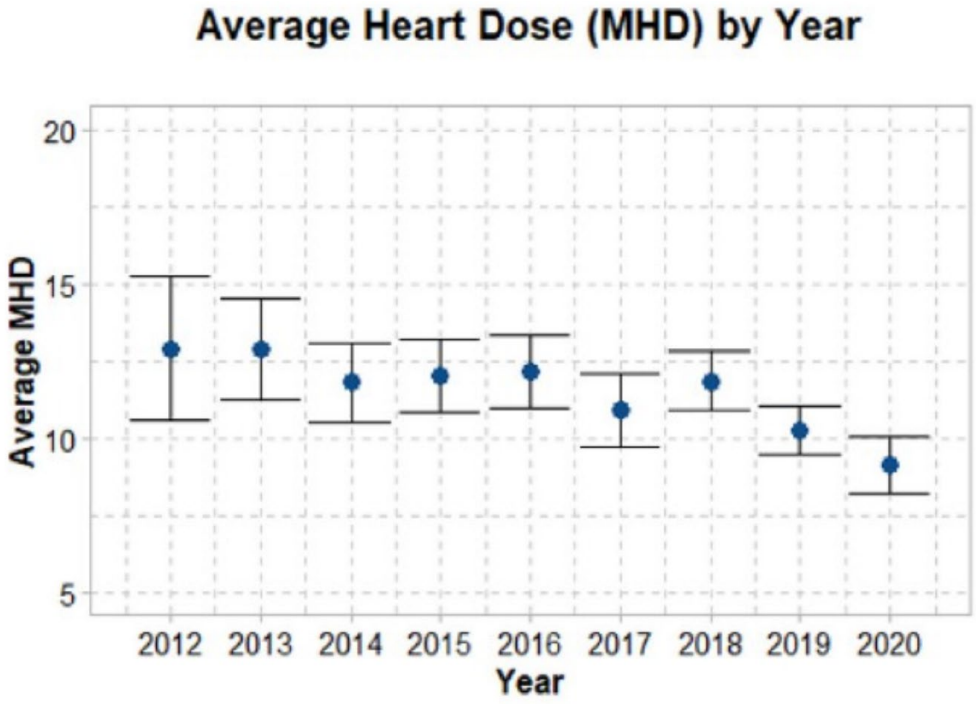
Heart dose & target coverage education led by Dr. Bob Dess

2018

Adopted as an MROQC quality metric

The result

Real-world proof that education + collaboration accelerates adherence to guidelines



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Herr, et al. Practical Radiation Oncology; 2021; 12(5):e376 – e381.

Practice-Changing Evidence: Lung IMRT

CLINICAL INVESTIGATION

Dosimetry and Toxicity Comparison of Three-Dimensional Conformal Radiation Therapy and Intensity Modulated Radiation Therapy in Locally Advanced Lung Cancer Across a Large Statewide Quality Collaborative

Steven G. Allen, MD, PhD,[a] Caitlin A. Schonewolf, MD,[a] Matthew J. Schipper, PhD,[a,b] Huiying (Maggie) Yin, MS,[a] Peter A. Paximadis, MD,[c] Larry L. Kestin, MD,[d] Michael Dominello, DO,[e] Melissa Wilson, MS,[d] Martha M. Matuszak, PhD,[a] James A. Hayman, MD, MBA,[a] and Shruti Jolly, MD, MBA[a]

[a]Department of Radiation Oncology, University of Michigan, Ann Arbor, Michigan; [b]Department of Biostatistics, University of Michigan, Ann Arbor, Michigan; [c]Corewell Health South, St. Joseph, Michigan; [d]Michigan Health Professionals, Farmington Hills, Michigan; and [e]Karmanos Cancer Institute, Detroit, Michigan

PUBLISHED 2025

A statewide comparison of dosimetry and toxicity for 3D conformal RT versus IMRT in locally advanced lung cancer

Made possible by 15 years of shared, high-quality data from our member facilities

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Allen, et al. International Journal of Radiation Oncology, Biology, Physics; 2025; 122(5):1248 – 1256.

Sharing What We've Learned



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15 Years of Lung Publications (1 of 3)

Year	Publication	Journal
2025	**Allen et al.** Dosimetry and Toxicity Comparison of Three-Dimensional Conformal Radiation Therapy and Intensity-Modulated Radiation Therapy in Locally Advanced Lung Cancer Across a Large Statewide Quality Collaborative	Int J Radiat Oncol Biol Phys
2024	**Herr et al.** Factors associated with acute esophagitis during radiation therapy for lung cancer	Radiotherapy & Oncology
2024	**Ramanathan et al.** Predictors of Early Hospice or Death in Patients With Inoperable Lung Cancer Treated With Curative Intent	Clinical Lung Cancer
2023	**Allen et al.** Prospective Evaluation of Limited-Stage Small Cell Lung Cancer Radiotherapy Fractionation Regimen Usage and Acute Toxicity in a Large Statewide Quality Collaborative	Practical Radiation Oncology
2023	**Herr et al.** Cardiac and Pulmonary Dosimetric Parameters in Patients with Lung Cancer Undergoing Postoperative Radiation Therapy Across a Statewide Consortium	Practical Radiation Oncology

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Full list of MROQC manuscripts: mroqc.org/manuscripts

15 Years of Lung Publications (2 of 3)

Year	Publication	Journal
2022	**Matrosic et al.** Knowledge-Based Quality Assurance and Model Maintenance in Lung Cancer Radiation Therapy in a Statewide Quality Consortium of Academic and Community Practice Centers	Practical Radiation Oncology
2021	**Laucis et al.** Racial Differences in Toxicity in Non-Small Cell Lung Cancer Patients Treated with Thoracic Radiotherapy	JCO Oncology Practice
2021	**Bryant et al.** Uptake of Adjuvant Durvalumab After Definitive Concurrent Chemoradiotherapy for Stage III Nonsmall-cell Lung Cancer	American Journal of Clinical Oncology
2021	**Herr et al.** Effect of education and standardization of cardiac dose constraints on heart dose in lung cancer patients receiving definitive radiation therapy across a statewide consortium	Practical Radiation Oncology
2021	**Wilkie et al.** Association Between Physician and Patient Reported Symptoms in Patients Treated with Definitive Radiotherapy for Locally Advanced Lung Cancer in a Statewide Consortium	Int J Radiat Oncol Biol Phys

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Full list of MROQC manuscripts: mroqc.org/manuscripts

15 Years of Lung Publications (3 of 3)

Year	Publication	Journal
2021	**McFarlane et al.** Predictors of Pneumonitis after Conventionally Fractionated Radiotherapy for Locally Advanced Lung Cancer	Int J Radiat Oncol Biol Phys
2019	**Dess et al.** Cardiac Dose in Locally Advanced Lung Cancer: Results from a Statewide Consortium	Practical Radiation Oncology
2017	**Paximadis et al.** Dosimetric predictors for acute esophagitis during radiation therapy for lung cancer	Practical Radiation Oncology
2017	**Matuszak et al.** Managing motion in conventionally fractionated lung cancer radiation therapy: Collaborative quality improvement from a statewide consortium of academic and community practices	Practical Radiation Oncology

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Full list of MROQC manuscripts: mroqc.org/manuscripts

What's Next



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Models for Lung and Cardiac Related Hospitalization

- Data capture began in 2018
- 2640 patients included in analyses
- 435 patients had a lung related hospitalization
  - Cumulative Incidence at 2 years ~ 23%
  - Pneumonitis: 41
  - Pneumonia:196
  - COPD: 163
- 220 patients had a cardiac related hospitalization
  - Cumulative Incidence at 2 years ~ 10%
  - MI: 35
  - Heart Failure: 51
  - Arrhythmia: 88
  - PE: 6

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Patient and RT Dose Data

Characteristic	Overall N = 2,640	5 fractions N = 884	30 fractions N = 985
Age	71 [65, 78]	75 [68, 81]	69 [63, 75]
ECOG at Baseline			
0-1	2,178 (87.0%)	712 (86.2%)	848 (89.0%)
2+	326 (13.0%)	114 (13.8%)	105 (11.0%)
Mean lung dose	7.74 [2.89, 13.95]	2.80 [2.07, 3.92]	13.93 [11.38, 16.94]
Mean heart dose	2.93 [0.39, 9.35]	0.34 [0.13, 1.92]	9.03 [3.89, 14.86]
Mean esophagus dose	6.41 [1.81, 17.43]	1.76 [1.15, 2.81]	17.85 [12.11, 24.60]

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Model for Risk of Cardiac Hospitalization

Predictor	HR	95% CI	p-value
Age (per 10 years)	1.19	(1.02, 1.40)	0.030
Supplemental oxygen: Y v N	1.29	(0.88, 1.89)	0.195
ECOG: 2+ v 0/1	1.39	(0.94, 2.06)	0.103
Any baseline cardiac comorbidity: Y v N	2.03	(1.31, 3.13)	0.001
Gender: M v F	1.61	(1.20, 2.18)	0.002
Mean Heart Dose, EQD2	1.03	(1.01, 1.06)	0.021

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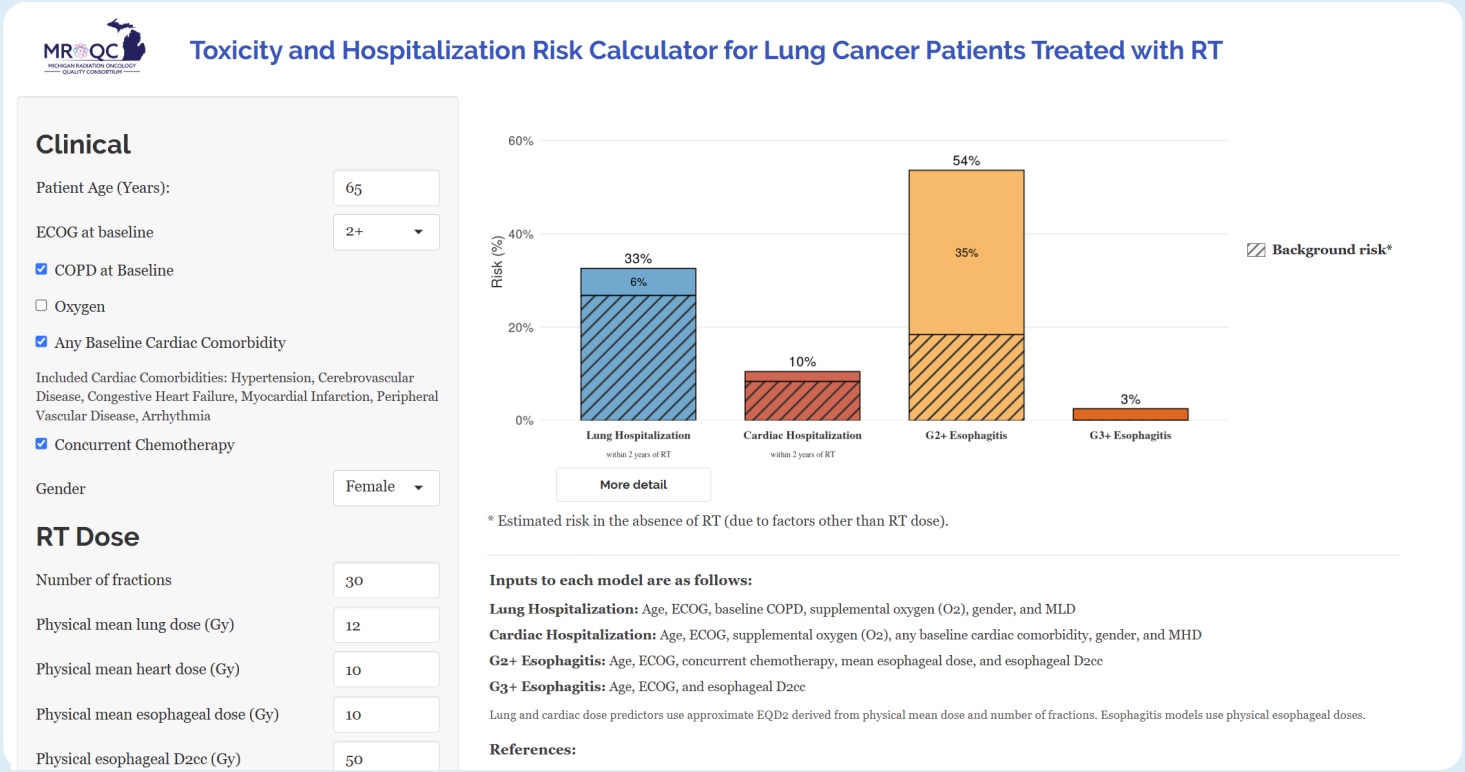
Model for Risk of Lung Related Hospitalization

Predictor	HR	95% CI	p-value
Age (per 10 years)	1.12	(1.01, 1.24)	0.031
Supplemental oxygen: Y v N	2.15	(1.71, 2.71)	<0.001
ECOG: 2+ v 0/1	1.79	(1.40, 2.27)	<0.001
Baseline COPD: Y v N	1.60	(1.28, 2.01)	<0.001
Gender: M v F	1.23	(1.02, 1.50)	0.035
Mean Lung Dose, EQD2	1.03	(1.00, 1.05)	0.026

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Introducing the New MROQC Lung App

Toxicity and Hospitalization Risk Calculator for Lung Cancer Patients Treated with RT



Personalized risk estimates

Lung & cardiac hospitalization, G2+ and G3+ esophagitis

Clinical + dose inputs

Combines patient factors with RT dose metrics

Background vs. RT risk

Shows risk without RT alongside total risk

Scan to open the calculator

Works in any web browser

Available: [expected by end of 2026]
lungmodels.mroqc.org

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Current MROQC Lung Initiatives

- Cardiac Substructures
- Cardiac & Pulmonary Hospitalizations and Outcomes
- PROs
- SBRT / Hypofractionation Guidance
- Lung Model and Dose Prediction apps

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Thank You!

Thank you to our members and partners for 15 years of collaboration.

Together, we have turned shared data into better, safer lung cancer care for patients across Michigan.

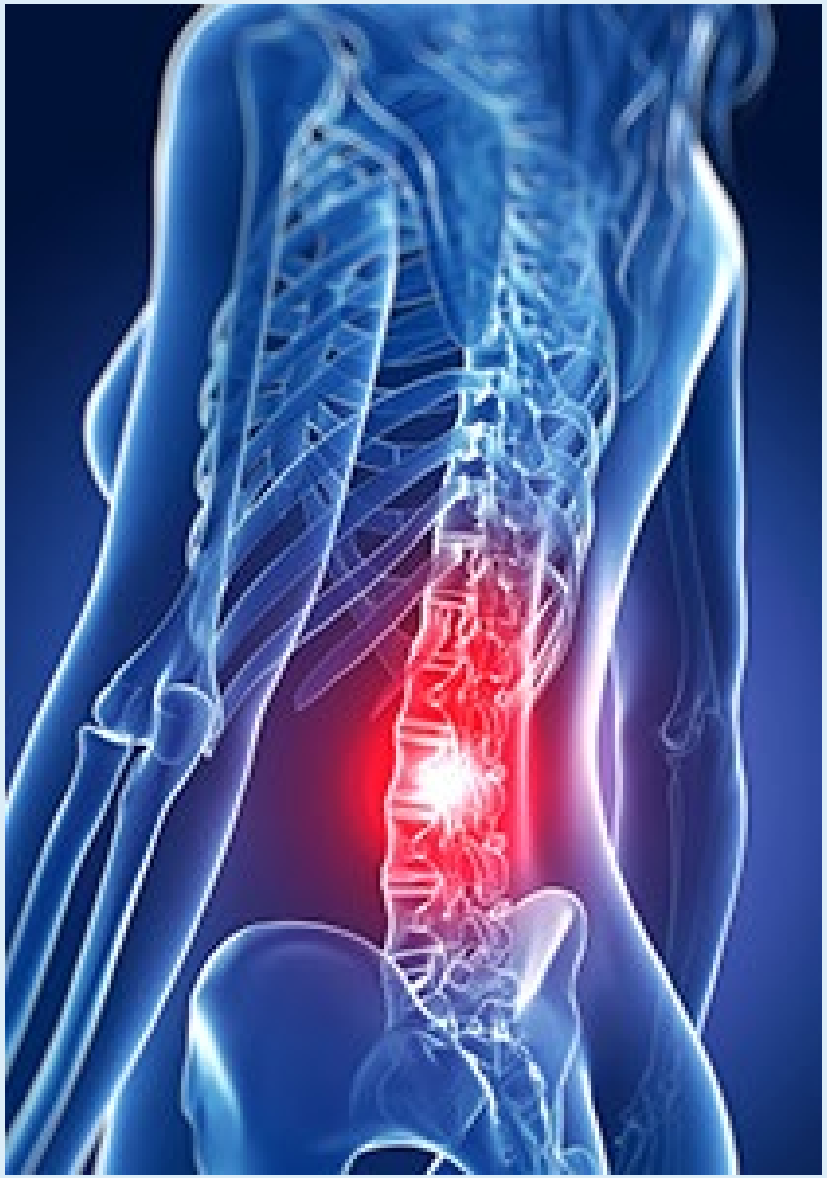
Here's to the next 15 years!

MROQC is supported by Blue Cross Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships program.

From Bone Mets to Mets

Mets Working Group

Celebrating 15 Years of MROQC



MR QC
METS WORKING GROUP

Today's Agenda

01 WHERE WE BEGAN

02 OUR IMPACT

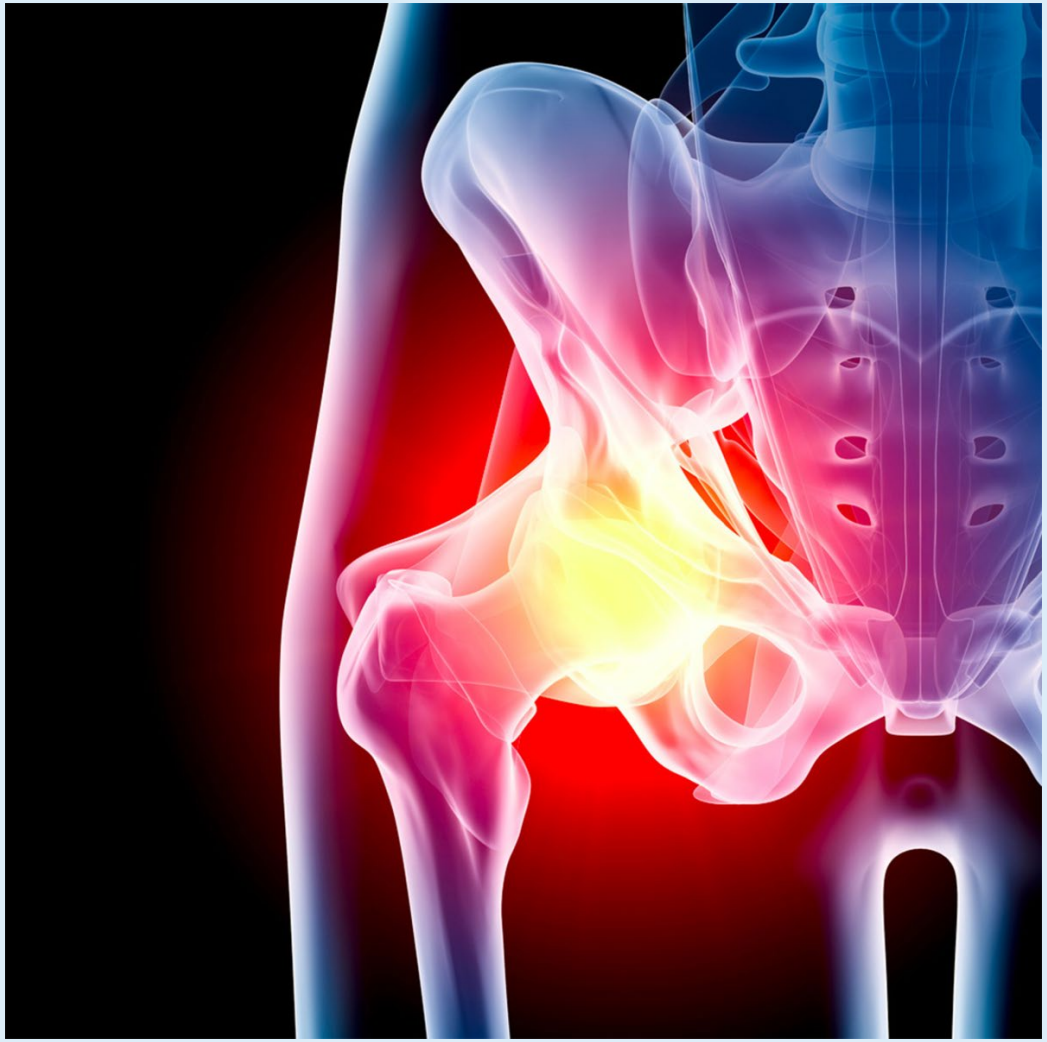
03 OUR WORK IN PRINT

04 BIG ANNOUNCEMENT

05 WHAT'S NEXT: BONE + BRAIN

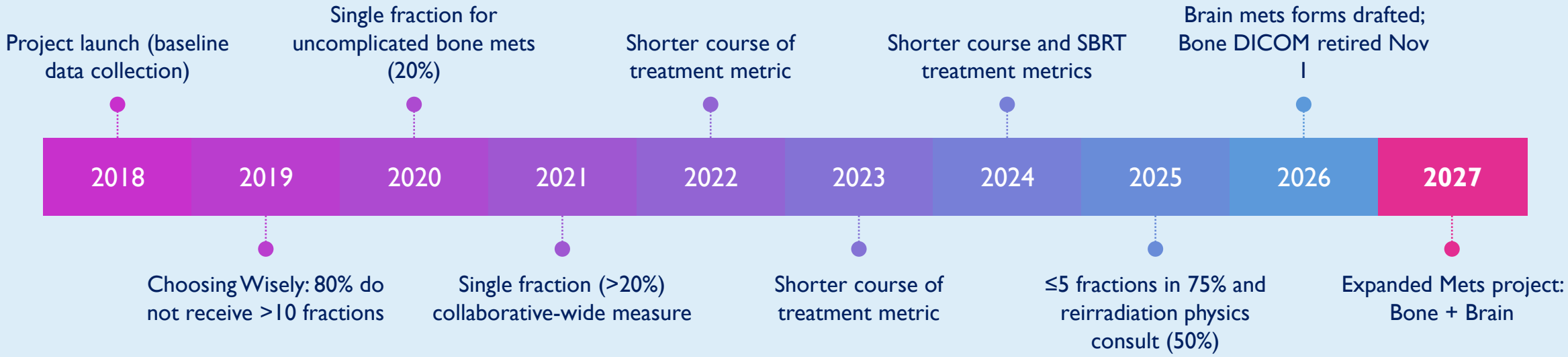
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Where It Began: Bone Mets



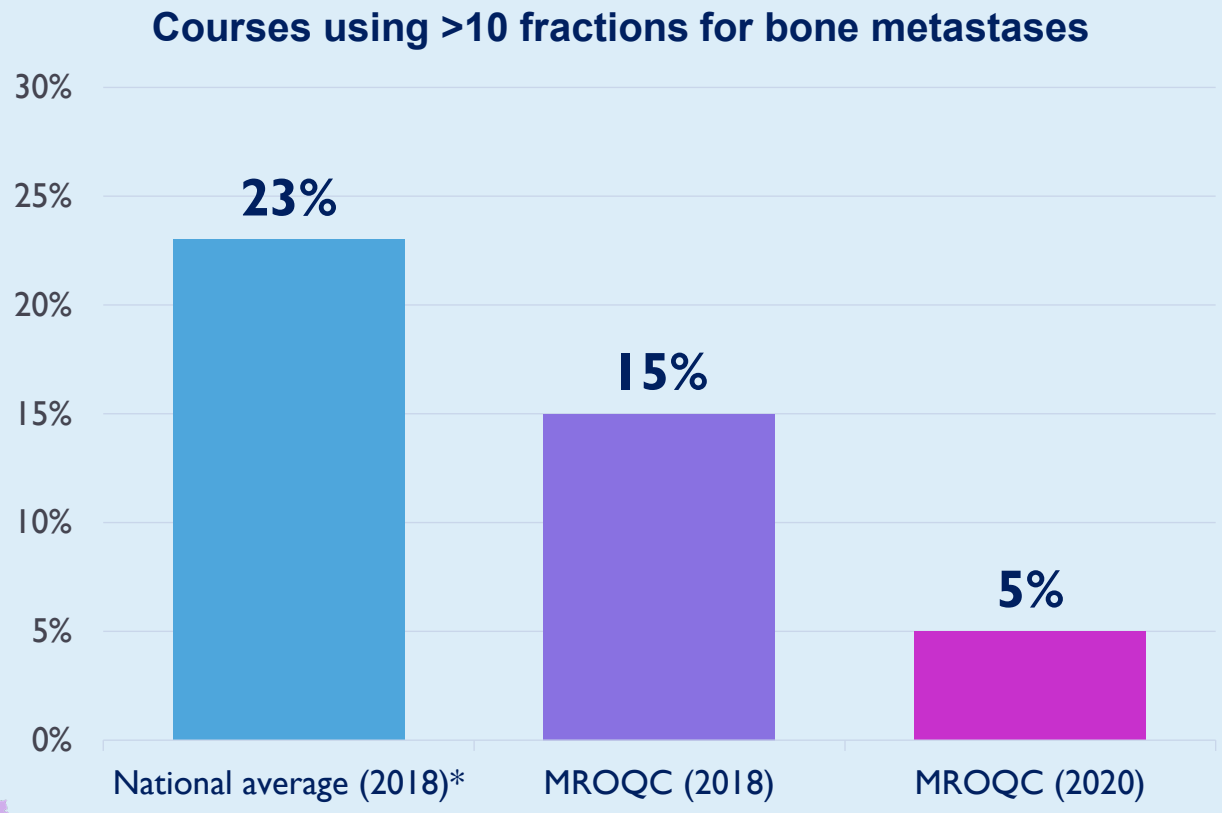
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Our Journey: 2018 to 2027



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Reducing Extended Fractionation



15% → 5%

drop in >10-fraction courses within two years of launch

In 2022, the Bone Mets project launched a measure for utilization of **5 or fewer fractions.**

MROQC METS WORKING GROUP

*Gupta et al. JCO Oncol Pract. 2020;16:e758–e769.

2026: Shorter Courses Are the Norm

87%

of bone mets courses used ≤5 fractions

614 of 703 courses · 24 of 27 facilities met the 75% target

96%

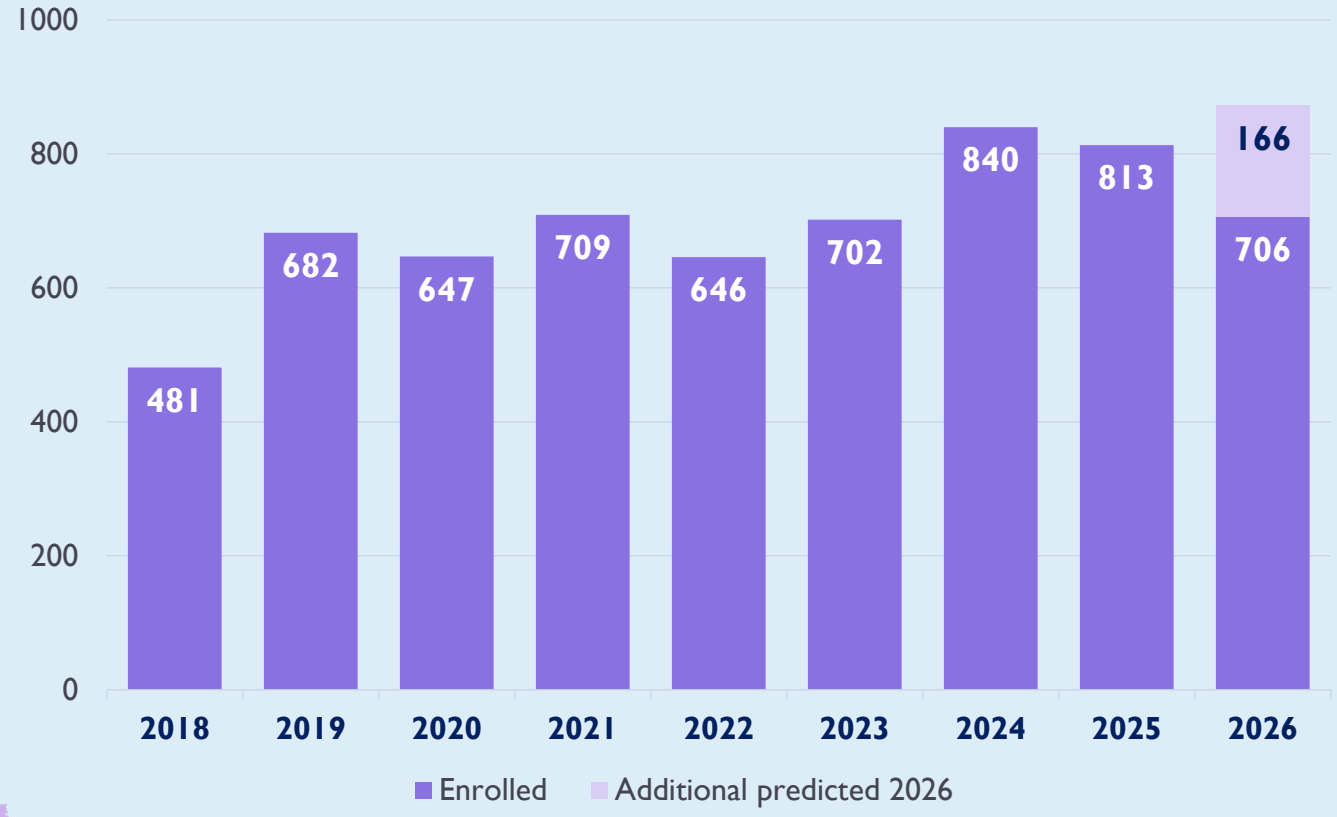
of reirradiation cases had a documented physics consult

182 of 190 cases · 24 of 25 facilities met the 50% target

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2026 performance period: RT start 1/1/2026–9/30/2026; data refreshed 10/12/2026. Rates pooled from facility-level counts.

Enrollment Across Michigan



6,226

patients enrolled since 2018

27

facilities enrolling in 2026

~872

projected for 2026, our highest year yet

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Source: 2026 Mets Enrollment Monthly Report; data refreshed 10/16/2026. 2026 total includes 166 predicted enrollments.

Our Work in Print

2018 **Spratt et al.** · *Int J Radiat Oncol Biol Phys*

Contemporary statewide practice pattern assessment of the palliative treatment of bone metastasis

2019 **Gharzai et al.** · *Practical Radiation Oncology*

Recommendations for single fraction radiation therapy and stereotactic body radiation therapy in palliative treatment of bone metastases: a statewide practice patterns survey

2021 **Jaworski et al.** · *Practical Radiation Oncology*

Contemporary practice patterns for palliative radiation therapy of bone metastases: impact of a quality improvement project on extended fractionation

2025 **Higgins et al.** · *Advances in Radiation Oncology*

Progress in shortening treatment courses for bone metastases in a statewide quality consortium

All MROQC manuscripts: **mroqc.org/manuscripts**

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Growing Together: Bone + Brain



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One Mets Project, Two Disease Sites

MR QC
BONE METS

Bone Mets

2018 – 2026

+

MR QC
BRAIN METS

Brain Mets

2026 groundwork

→

MR QC
METS

Mets: Bone + Brain

Launching January 20, 2027

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What Brain Mets Will Capture

1 Quality of treatment delivery

- Pretreatment MRI: sequences, slice thickness and timing
- SRS for patients with limited mets (1-5, 5-10)
- Strategies for large lesions, post-operative cases

2 Quality of Life: Neurocognitive preservation

- Utilization and quality of HA-WBRT
- Use of memantine
- Number of mets in SRS vs. HA-WBRT decisions

3 Adding the caregiver voice

- PROs, as in all MROQC projects (baseline & 3 mo)
- New: caregiver surveys when a patient is functionally unable to respond
- Rollout studied in a focused PDSA cycle

Forms: clinical data abstraction, physician, patient–caregiver and physics, plus a one-time institutional physics form per facility

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Mets Working Group: 2-Year Roadmap

2026 Focus & Foundation

Brain Mets

- Draft data collection forms
- Expert-led discussions: large/post-op cases, SRS for 5–10 mets, dose metrics and toxicity
- Case-based education and shared learning

Bone Mets

- Define scope and gaps in reirradiation
- Inventory current practice patterns and barriers

2027 Alignment & Application

Brain Mets

- Start enrollment to the project
- Develop consensus guidance and reference materials
- Identify opportunities for standardization

Bone Mets

- Advance reirradiation frameworks: patient selection, cumulative dose

Start with shared understanding, then build toward alignment.

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Big Announcement

We are retiring DICOM collection for Bone Mets

Effective November 1, 2026

Thank you to every facility that uploaded DICOM over the life of the project.

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What Happens Next

1

Nov 1, 2026

Bone Mets DICOM collection retired

New Bone Mets enrollment pauses

2

Nov 1 – Jan 19

Enrollment pause

No new patients enrolled to the Bone Mets project

3

Jan 20, 2027

Expanded Mets project launches

Enrollment opens for Bone + Brain

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METS WORKING GROUP

Thank You!

15 years of improving care together.

Here's to the next chapter:

Mets, Bone + Brain, in 2027.

Celebrating 15 Years of MROQC

Prostate Quality Improvement: From Launch to the Future



MR QC
— PROSTATE WORKING GROUP —

Our Prostate Story



WHERE WE STARTED

2020 pilot



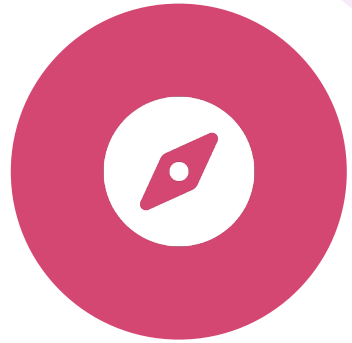
HOW WE'VE GROWN

6,000+ patients



WHERE WE ARE TODAY

2026 results



WHERE WE'RE HEADED

2027 and beyond

Prostate by the Numbers

15

years of MROQC

6

years of prostate collaboration

6,000+

prostate patients enrolled since 2020

27

facilities enrolling patients in 2026

3,190

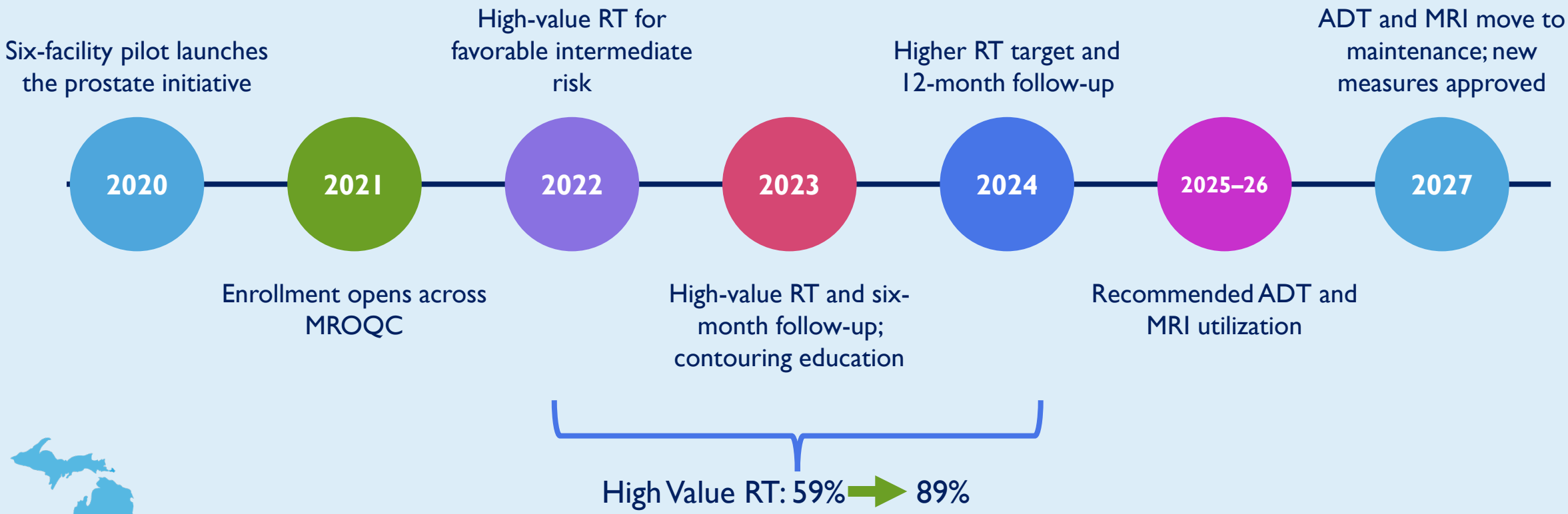
patients linked with MUSIC

5

published prostate manuscripts

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Our Prostate Journey



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Enrollment Keeps Growing

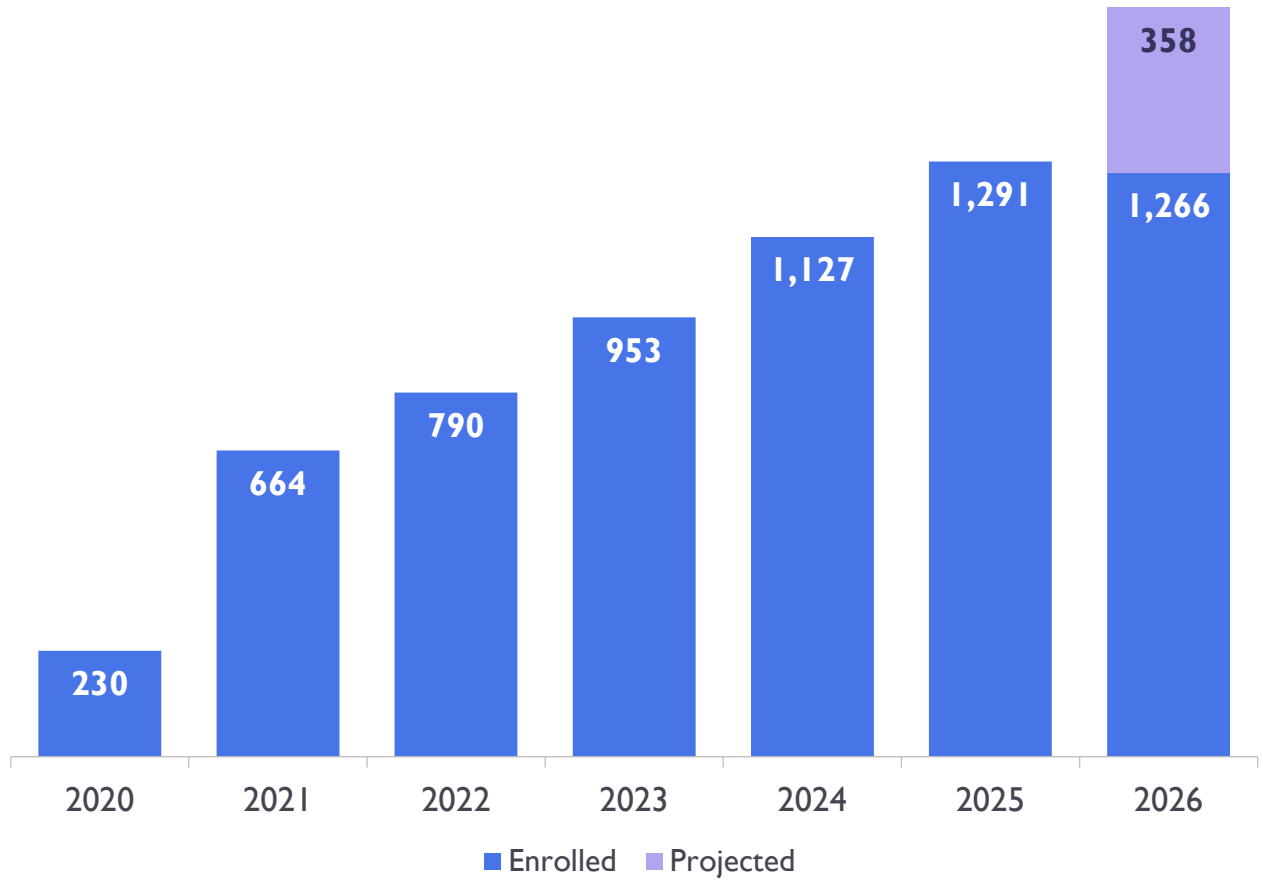
6,000+

patients enrolled over six years

~1,600

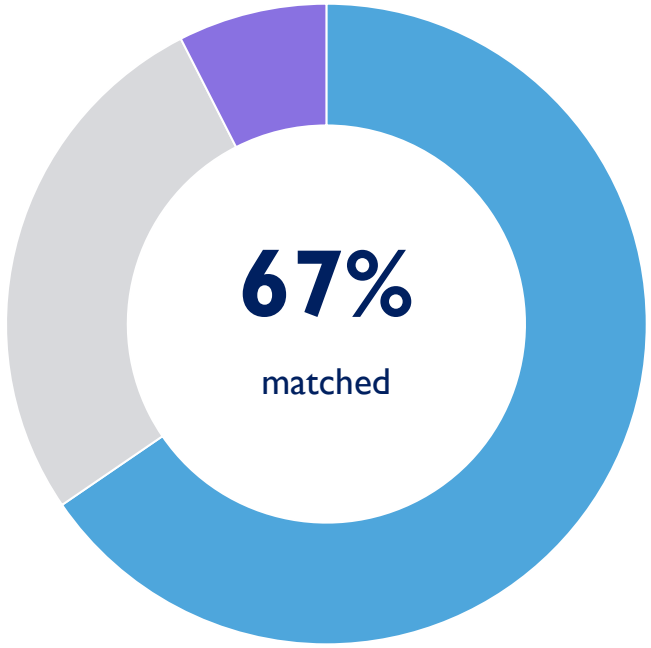
patients estimated for 2026, our biggest year yet

Prostate enrollment by year



Source: Prostate enrollment report, data as of 10/16/2026. 2026 = 1,266 enrolled to date + 358 projected.

Better Together with MUSIC



4,907 eligible patients at 14 matching facilities

3,283 patients linked

MROQC radiation records matched with MUSIC urology data

Less duplicate data entry

Facility teams don't re-enter what MUSIC already collects

Powers our quality measures

MUSIC baseline data supplies risk grouping for the ADT measure

MROQC — PROSTATE WORKING GROUP —

Source: Prostate Matching Dashboard, data current as of 10/19/2026. Pending = <26 weeks from enrollment without a MUSIC match.

2026 Prostate Quality Initiatives

Recommended ADT

Intact, localized, high-risk disease

FULL-POINTS TARGET	2026 RESULT
≥65%	85.7%

209 of 244 patients

MRI Utilization

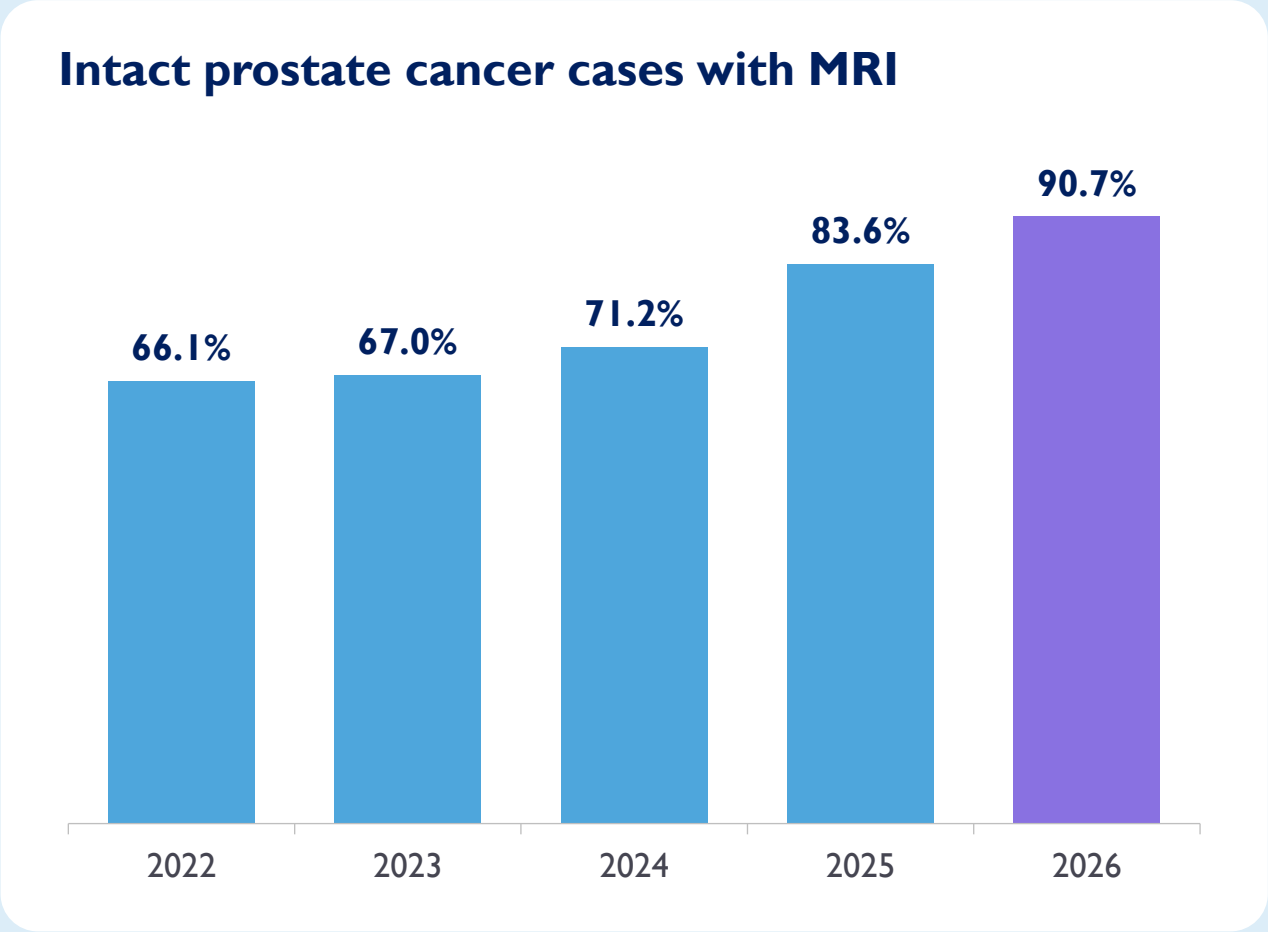
Intact prostate cancer

FULL-POINTS TARGET	2026 RESULT
≥70%	97.5%

808 of 829 patients; 26 of 27 facilities at target

Source: 2026 Prostate Quality Measures Report, refreshed 10/13/2026 (RT start 1/1–9/30/2026). Results may change with remaining data entry.

MRI Success: A Consortium-Wide Shift



+24.6 pts

in MRI use since 2022

- **Jul 2023**
  Contouring education, Dr. McLaughlin
- **2024**
  MROQC microboost publication
- **2025–26**
  MRI utilization quality measure
- **Jun 2026**
  Precision targeting education, Dr. Seibert

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September 2026 WG complete-case analysis (36 observations missing MRI data); a different population from the annual quality measure.

Education Spotlight

JUNE 16, 2026 WORKING GROUP

Dr. Tyler Seibert

MRI-guided precision targeting and focal boost

30% average overestimate of prostate size with CT-based contours

16% of CT-based contours miss part of the prostate

67% fewer local recurrences with focal boost (FLAME trial)

44% fewer metastases, with no increase in side effects

The opportunity: only about 10% of eligible Michigan patients receive focal boost today. Builds on Dr. Patrick McLaughlin's July 2023 contouring session.

Sharing What We've Learned



PUBLISHED

Cancer · 2026

Diagnostic and RT trends in low-risk disease (Monda et al.)

JCO Oncology Practice · 2025

ADT practice patterns in high-risk disease (Dykstra et al.)

JNCI Cancer Spectrum · 2025

Post-prostatectomy RT: adverse features and ADT use (Regan et al.)

Red Journal · 2024

Variation in ADT use in intermediate risk (Dykstra et al.)

Adv Radiat Oncol · 2024

Microboost in localized prostate cancer (Regan et al.)

IN THE PIPELINE

Manuscript in development

Hormone therapy decisions, from our ASTRO 2026 poster

ASTRO 2027 · Planned

Our consortium-wide MRI utilization experience

See all MROQC manuscripts:
mroqc.org/manuscripts

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The Next Chapter

2027 measures approved by BCBSM

ADT and MRI utilization move into maintenance

MRI beyond the lesion

Apex definition, contouring and treatment planning

Pilot RSI and planning tools

RSI imaging, auto-contouring and MRI-to-CT registration

A standard MRI protocol

Explore a consortium-wide MRI protocol for RT planning

Share our MRI story

ASTRO 2027 abstract or publication

Here's to the **next 15 years**

Thank you!

Thank you to our patients, facility teams and the Coordinating Center for six years of prostate quality improvement.

Here's to the next 15!

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M-EQUAL Update

MROQC is committed to identifying and addressing gaps in care experienced by our patients.



M-EQUAL: Progress and Future Direction

Our priorities as we move into 2027

01 Cannabis Education Measure

2026 performance and plans for breast and lung education resources

02 Social Needs Screening

Priorities for understanding transportation and food insecurity needs

03 Community Partnerships

Partnering with Michigan 2-1-1 to strengthen awareness of community resources and support healthcare teams.

2026 Cannabis Education Measure

Measure criteria

Measure

At least 80% of breast cancer patients who report using cannabis in the past 30 days are offered an MROQC cannabis education document during treatment.

Patients Included

Breast cancer patients beginning treatment January 1–September 30, 2026, who report cannabis use within the 30 days before treatment.

Incentive Program

CQI–VBR

The Breast Cannabis Education Measure will transition to maintenance in 2027.

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— M-EQUAL —

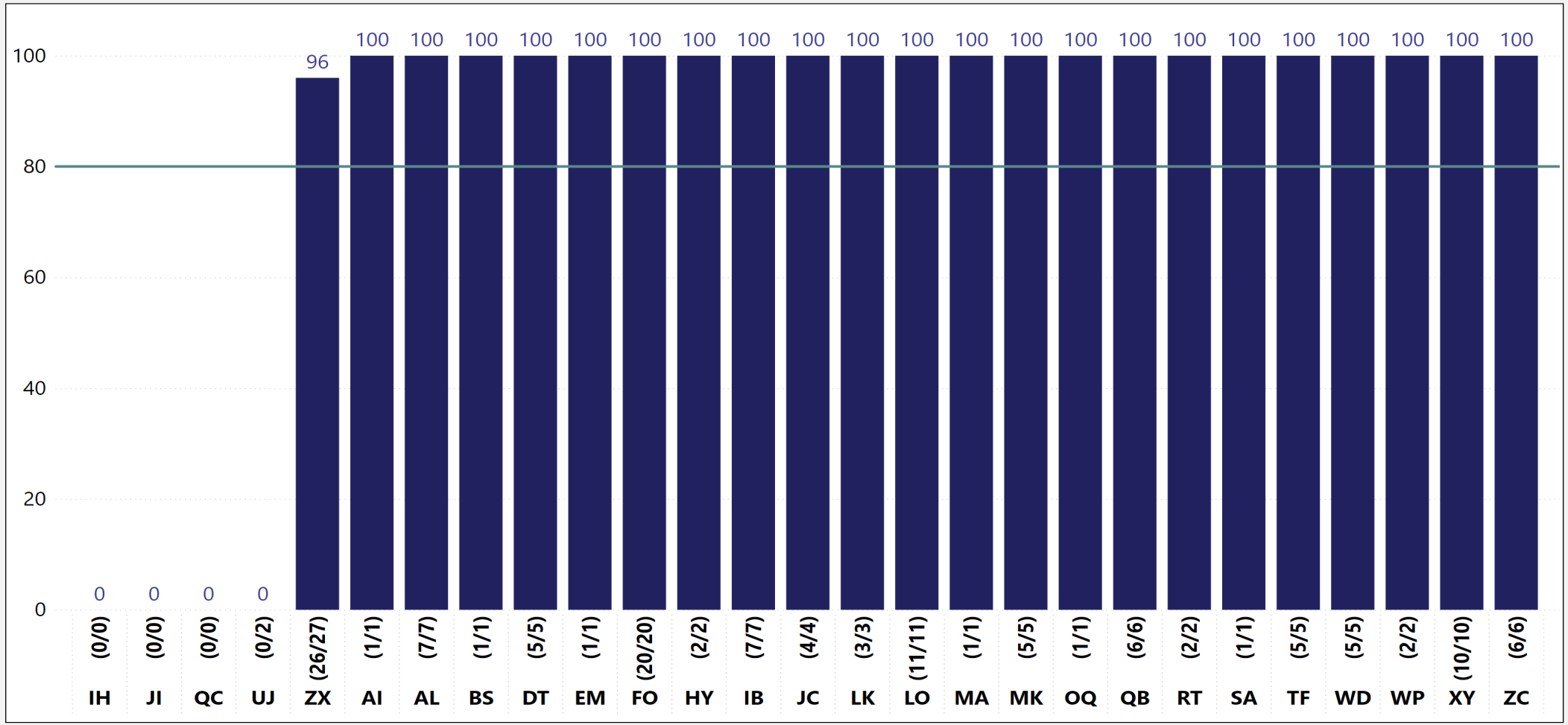
Cannabis Education For All Facilities in 2026

Associated Incentive Program: CQI VBR

DATA UP TO DATE AS OF 10/01/2026

Measure Description: At least 80% of breast cancer patients who report using cannabis in the past 30 days are provided an MROQC cannabis education document during treatment

Full Points: >=80%



Cannabis Education: Looking Ahead

Patient education resources beyond the current measure

Breast cancer

Maintain the existing cannabis education document for the 2027 measure maintenance period, with updates to reflect current evidence.

Lung cancer

The MROQC Lung Working Group will develop a lung cancer–specific cannabis education document.

Goal: Maintain useful, disease-specific education for patients and care teams.

The lung cancer education document will not be associated with a performance measure.

Social Needs: Background

Impact of transportation barriers and other social needs

Transportation barriers are one of the most commonly reported reasons for missing radiation appointment.

Transportation barriers cause delay in diagnosis and follow-up and access to guidance concordant care.

Patients with transportation needs often have other social needs that cause treatment interruptions.

Ashley N. Wercholuk et al.,The Road Less Traveled: Transportation Barriers to Cancer Care Delivery in the Rural Patient Population. *JCO Oncol Pract* **18**, 652-662(2022).DOI:10.1200/OP.22.00122; Cui K, et al., **Missed Radiotherapy Visits Following Initiation of Systematic Assessment of Patients' Transportation Need,** International Journal of Radiation Oncology, Biology, Physics, 123, e469-e470

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— M-EQUAL —

Social Needs: Screening Barriers

Screening for social needs is important but may be challenging

Common screening concerns

- Lack of staff capacity or training
- Unfamiliarity with available resources for patients when a social need is disclosed
- Redundant screening
- Closing the loop when trying to address a disclosed need

MR QC
— M-EQUAL —

Understanding Social Needs Screening

Transportation and food insecurity

Before we consider additional screening questions, we want to understand what is already happening in clinics.

What we want to learn

How clinics identify transportation and food-related needs—and respond.

How we will use it

Understand current workflows and identify gaps in resource referrals.

We Want to Hear From You

Answer based on your radiation oncology clinic or department

THE SURVEY ASKS ABOUT

Screening

Transportation, food and other social needs

Referrals

What happens when a need is identified

Michigan 2-1-1

How familiar you are with 2-1-1

Scan to take the survey

QR codes are also at your table

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SAVE THE DATE

FEBRUARY 2027

5

FRIDAY

12:00 PM

Make the Right Call

How 211 Simplifies Community Referrals for Healthcare Teams



PRESENTED BY

Sarah Kile

Director of Community and Partner Engagement

Michigan 2-1-1

1-hour virtual session • CE credits available

Registration details and additional information to come

Help Shape M-EQUAL's Work

Your experience can help move this work forward

Join the committee

We are committed to identifying and addressing gaps in care experienced by our patients.

Ongoing involvement

Be a resource

Share your experience, ideas or connections when specific topics arise.

As your time allows

Interested? Connect with the M-EQUAL committee after the meeting.

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ROQCSTAR REPORT

Melissa Mietzel, MS

October 30, 2026

TODAY'S REPORT

- Upcoming Deadlines
- EC Updates
- Honoring Our Members

UPCOMING DEADLINES

November 15, 2026: Deadline for 2026 P4P and 2027 Gold Card|CQI VBR data entry

January 25, 2027: Deadline for 2026 case volumes



MRQC
MICHIGAN RADIATION ONCOLOGY QUALITY CONSORTIUM

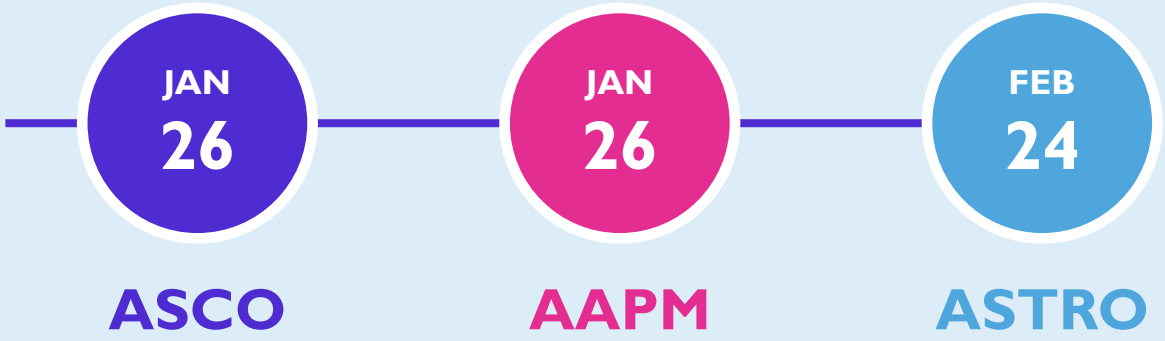
2027 PROFESSIONAL MEETINGS

SUBMIT YOUR IDEAS TO THE COORDINATING CENTER BY

Monday, November 16, 2026

Early ideas give us time for Working Group & Executive Committee approval, and give the stats team time for analysis.

2027 SUBMISSION DEADLINES



THANK YOU FOR YOUR SERVICE

Honoring our Executive Committee members whose terms end in 2026



Dr. Paul Kocheril

Genesys Hurley

Executive Committee



Dr. Mazen Mislmani

WMCC

Executive Committee

CALL FOR CLINICAL CHAMPION VOLUNTEERS

🩺 MROQC is seeking a **Clinical Champion** from a facility with ≤**3 radiation oncologists** to serve on the **Executive Committee** for a **3-year term** beginning **January 2027**.

This role offers the chance to:

- Represent smaller practices
- Advance statewide quality improvement
- Shape MROQC's strategic direction

👉 **Interested?** Please connect with **Melissa** at or after today's meeting.

ANNUAL BCBSM SURVEY

Scan me!

1. **Let's pause**
   We'll take a few minutes right now to complete the survey together.

2. **Scan the QR code**
   Opens on your phone, just four questions.

3. **Prefer paper?**
   Paper surveys are available, just raise your hand.

Last year we hit **100% response**. Let's do it again!

ROQCSTARS,

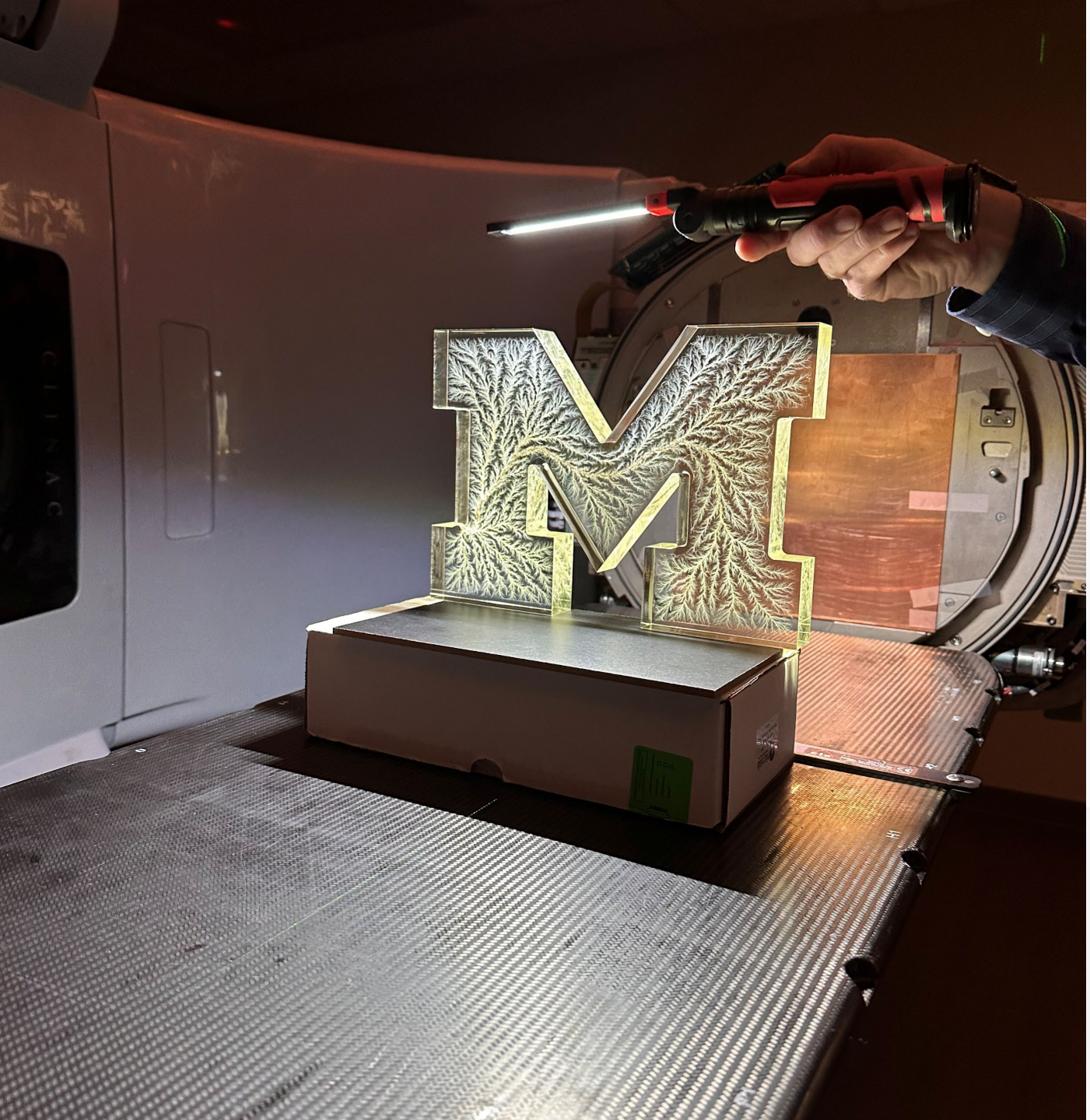
LET'S CELEBRATE!

15 years of quality, connection & shared energy



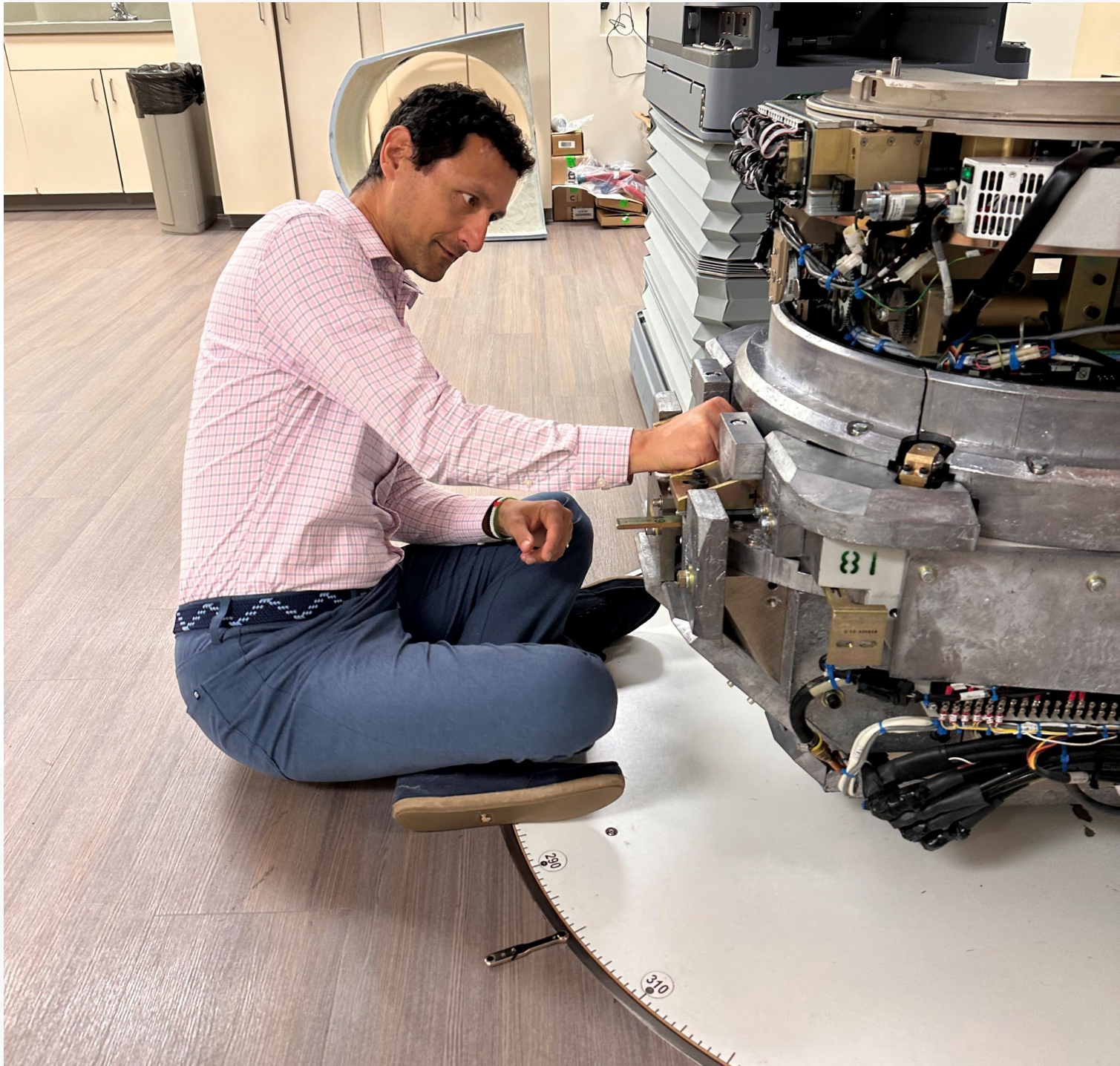
Electrons Trees: Where Science Becomes Art

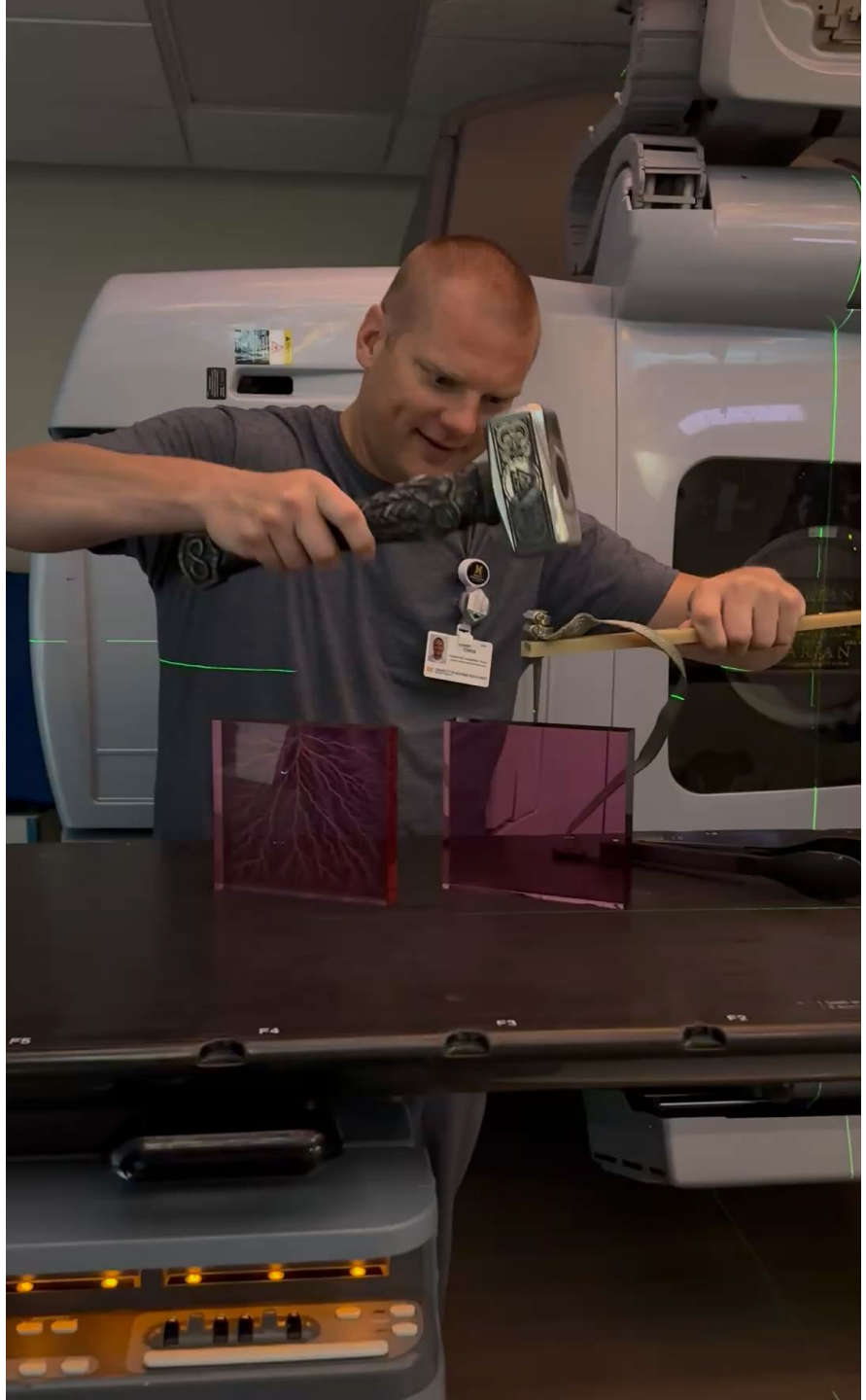
Celebrating 15 years of MROQC



Electron trees are branching patterns created when high-energy electrons travel through an insulating material. Each tree captures an invisible physical process in a striking, permanent form.

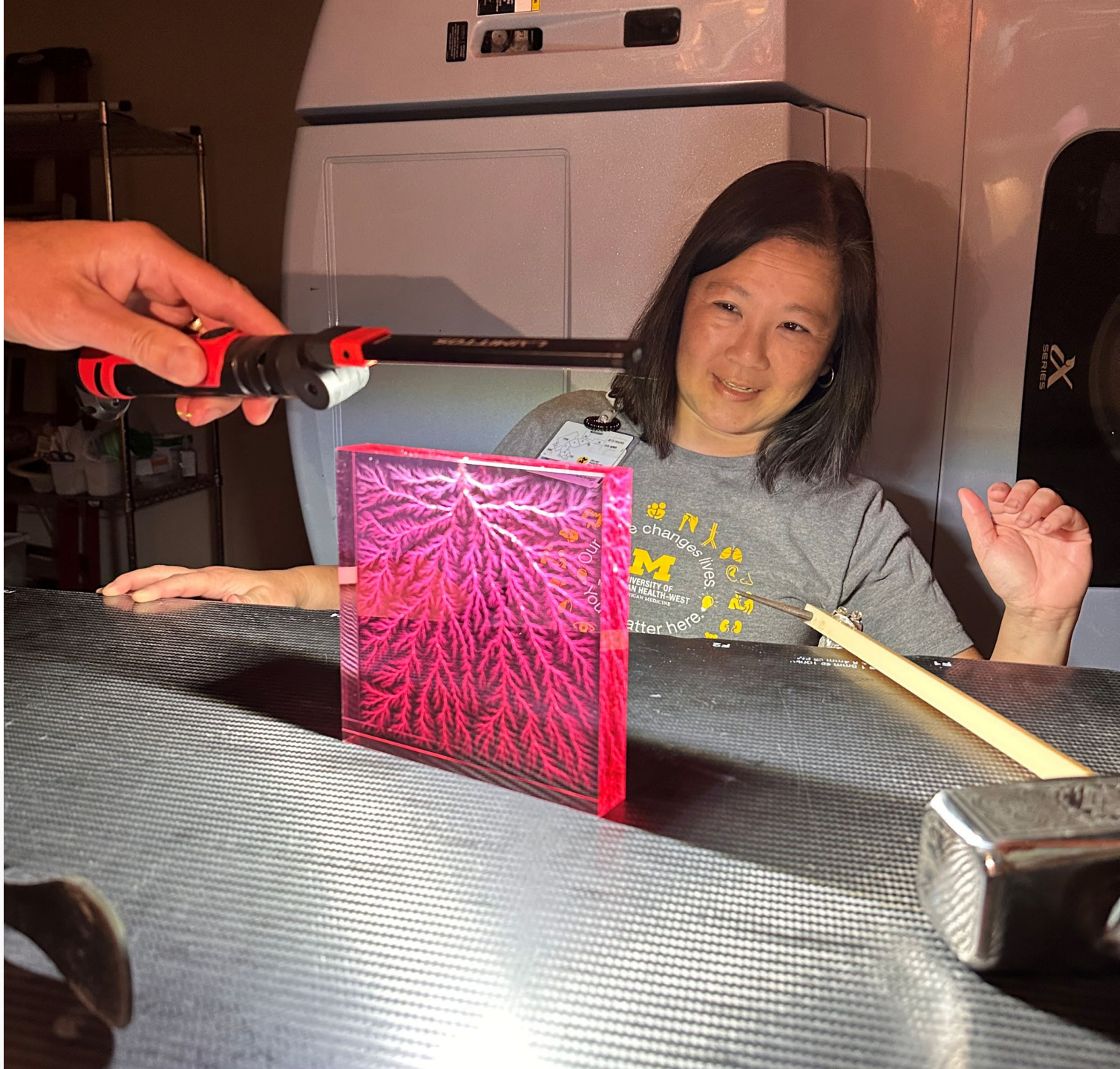
At the end of its service life, a linear accelerator can be modified to generate the high-energy electron fields. The accelerator deposits charge within an acrylic block; a controlled discharge then forms a permanent, three-dimensional network of microscopic channels.





An electron beam deposits electrical charge within the material. When that stored energy is released, it creates a rapid network of microscopic pathways—leaving behind a luminous, tree-like record of the event.

These patterns are known as **Lichtenberg figures**. Each electron tree is shaped by countless small variations in material, charge, and discharge.





Like a thriving organization, an electron tree grows through connection, branching, and shared energy. It honors the paths that brought us here—and the new directions still ahead.

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TARGET GO-LIVE
January 20, 2027



ROADMAP TO REDCAP

Meri Seferi and Vinoothna Bavireddy

TODAY'S ROUTE



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WHAT IS REDCAP?

Research Electronic Data Capture

A secure, web-based platform for building and managing research databases and surveys.

What it means for MROQC

One secure, centralized home for our disease-site databases, starting with Bone Mets and Brain Mets.

2004
Created at Vanderbilt University for research data collection

Global
Used across the international research community

Flexible
Supports research databases and surveys

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WHY REDCAP

Why we chose it as the long-term home for MROQC data

- **Cost-effective platform**
- **Expanded features and flexibility**
- **Improved patient experience for emailed PRO surveys**
- **Secure, HIPAA-compliant, and trusted by institutions worldwide**
- **Scalable for long-term growth**

STARTING WITH

Bone Mets + Brain Mets

Prostate, Breast, and Lung: later phases planned for 2027.

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WINS & HIGHLIGHTS

One login

One sign-in to reach your REDCap forms

Common platform

One shared platform for MROQC projects

Real-time data checks

Entries are checked as you go

User Access Manager

Multiple facilities, passwords, and two-factor login

At-a-Glance Patient Status

See clinical forms, physics forms, and DICOM status in one patient view

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CLINICAL WINS & HIGHLIGHTS

What changes for the clinical team and CDAs

On-Demand PRO Scheduling

Patient emails can be scheduled as needed, providing greater flexibility

Real-Time Data Visibility

Users can view submitted forms and results right away

Improved Treatment Course Tracking

Multiple courses of treatment are captured in a more structured format (e.g., Patient 234-1, 234-2, etc.), allowing for clearer tracking.

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PHYSICS & DOSIMETRY WINS & HIGHLIGHTS

Simplified data entry

Bone Mets: multiple plans on one form, not one form per plan

Data organized by course

Bone Mets: no more matching forms by course start date

Tabular data entry

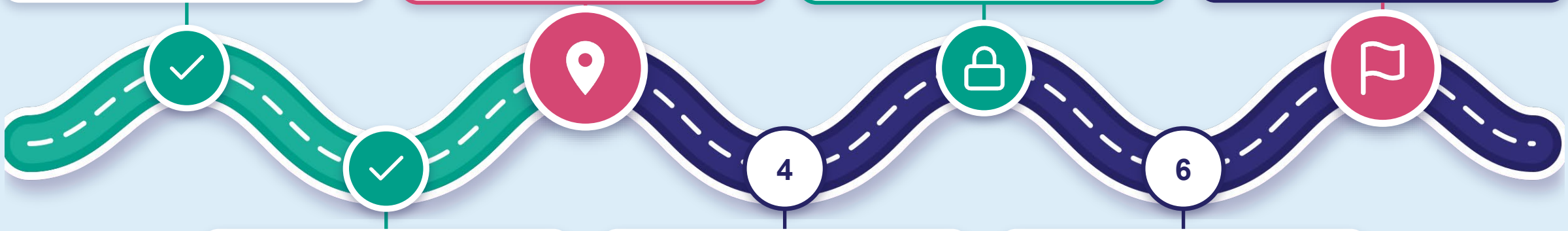
Multiple plans and targets in a table instead of a list

More flexible DICOM upload

Accepts MRI scans and files for multiple courses of treatment

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THE ROAD TO GO-LIVE



JUNE 2026

Planning

✓ Complete

WE ARE HERE

Access & Training

OCT – NOV 2026

Accounts + materials

DECEMBER 1, 2026

Bone Mets Entry Closes

No further entries or edits

JANUARY 20, 2027

Target Go-Live

Bone + Brain Mets live in REDCap

JUL – OCT 2026

Design & Build

✓ Forms built in REDCap

NOVEMBER 2026

Bone Mets Transition

Nov 1st: new-record cutoff

Nov 30th: finish data entry

DEC 2026 – JAN 2027

Data Transfer + Training

Data move + user training

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IMPORTANT DATES TO KNOW

NOV 2026

1

New-record cutoff

Beginning Nov 1, do not add new patients to the current Bone Mets database.

NOV 2026

30

Last day for data entry

Complete all remaining Bone Mets data entry by this date.

DEC 2026

1

Bone Mets entry closes

No further entries or edits in the current Bone Mets database.

JAN 2027

20

Target go-live

Bone Mets + Brain Mets live data collection begins.

Training: December 2026 to January 2027, before target go-live

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WHO GETS ACCESS FIRST

Access is provided in two groups, starting with the people who will enter the data

GROUP 1 | PRIORITY: current users who will enter the data

GROUP 2 | BACKUPS

WAVE 1
Oct 12 – 31, 2026

Clinical Data Abstractors (CDAs)

Current database users who will enter data in REDCap

WAVE 2
November 2026

Physics & Dosimetry

Current database users. Continues through November

LATER
Dates to be shared

Backup users

Team members who back up data entry. Access is given after the priority group.

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THANK YOU TO OUR VOLUNTEERS

- J — Jen Davis
- H — Howayda Messiha
- L — Liza Morris
- A — Amber Tucker
- A — Andrea Smith
- M — Marissa Perrino

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WHAT TO LOOK FOR IN YOUR INBOX

Access email

From: **MROQC Coordinating Center**

Subject: **Action Required: Set Up Your REDCap Access for MROQC**

REDCap User Access Guide

Watch for it

CDAs: sent October 12. Physics & Dosimetry: first week of November.

Follow the guide

Step-by-step instructions with screenshots. Complete the steps in order.

Already tested?

Check access to each environment. Log in every 30 days once access is active.

Questions?

Meri Seferi | mseferi@med.umich.edu

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THE ACCESS PROCESS AT A GLANCE

Quick and straightforward: *follow the guide for steps 1–4, and we'll walk you through step 5.*

1

Share your info

Complete a short survey. MROQC requests your U-M Level 1 account for you.

2

Set your U-M password

Use the uniqname emailed by IT Accounts. This is also your REDCap password.

3

Set up two-factor

Okta two-factor login. A mobile phone is required.

4

Request REDCap

Complete the REDCap training survey and request your account.

5

Log in

Log in the first time. MROQC adds you to your project(s) and confirms access.

Keep it active: log in to both the Training and Production environments at least once every 30 days.

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BONE METS: PATIENTS ALREADY IN PROGRESS

1 Every record moves
All records since the project began move to REDCap.

2 No re-enrollment
Returning patients keep their MROQC record and ID.

3 New treatment, new course
Add the next course: 234-1, then 234-2.

WHAT FACILITY USERS WILL SEE: Record Status Dashboard

● Complete ○ No data entered yet

Record ID	Enrollment	Treatment Course									
	SE1: CDA Patient Enrollment Form	CDA: Bone Mets Patient Treatment Course Form	M1: CDA Bone Mets Baseline Clinical Data	M3: CDA Bone Mets Systemic Therapy Data	M4: Physician Bone Mets Toxicity Evaluation	SE2: Early Termination of MROQC Patient Participation	Patient Opt-Out Survey	MDST: Bone Mets Demographic Screening Tool	M6: Patient Pre-Treatment Bone Mets Questionnaire	MRTD: Bone Mets Radiotherapy Technical Details Form	Dicom Upload
27990	●	●	●	●	●	●	○			●	○
27991	●	●	●	●	●	○	○			●	○
27984	●	●	●	●	●	○	○			●	○
27985	●	●	●	●	●	○	○			●	○

Data Collection Instrument	Enrollment	Treatment Course Course Start Date: 2026-09-16 (#1)	+ Add new Course Start Date: 2026-09-22 (#2)
SE1: CDA Patient Enrollment Form	●		
CDA: Bone Mets Patient Treatment Course Form		●	●
M1: CDA Bone Mets Baseline Clinical Data		○	○
M3: CDA Bone Mets Systemic Therapy Data		○	○
M4: Physician Bone Mets Toxicity Evaluation		○	○

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LATER STOPS: PROSTATE, BREAST & LUNG

Later phases planned for 2027. Dates and sequence to be confirmed.







Until then: keep using your current databases until you hear from us.

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WHAT WE NEED FROM YOU

CDAs, Physics & Dosimetry

- **Physics & Dosimetry:** watch for your access email in the first week of November
- Log in to Training and Production every 30 days
- Watch for training details for Dec 2026 – Jan 2027

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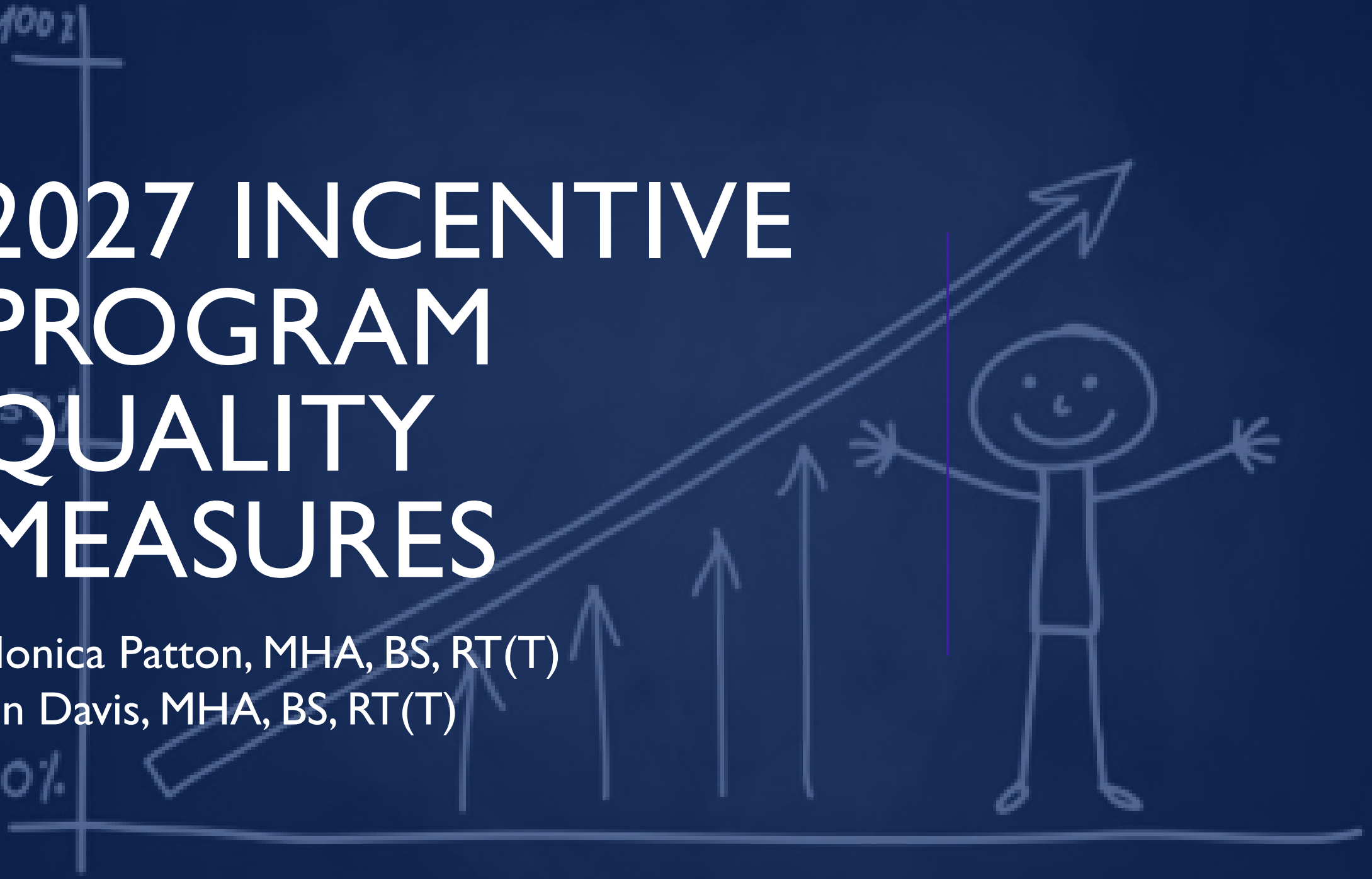
TARGET GO-LIVE
January 20, 2027



QUESTIONS?

2027 INCENTIVE PROGRAM QUALITY MEASURES

Monica Patton, MHA, BS, RT(T)
Jen Davis, MHA, BS, RT(T)



2027 Measures at a Glance

Site	Measure	Full points at	Points	Programs
Breast	Prone positioning	**≥20% treated prone**	**12**	P4P · GC · VBR
Breast	Lymphedema arm measurements	**Parts A and B met**	**12**	P4P · GC · VBR
Lung	Hypofractionation (collaborative-wide)	**≥60% (median)**	**12**	P4P · VBR
Lung	Rib & chest wall toxicity NEW	**≥70% completion**	**10**	P4P · GC · VBR
Bone Mets	Reirradiation documentation	**≥50% fully documented**	**12**	P4P · GC · VBR
Prostate	MRI registration & GTV contouring NEW	**≥20% of eligible patients**	**12**	P4P · GC · VBR

P4P=Pay for Performance| GC = Gold Card | VBR = CQI Value-Based Reimbursement | Measurement period: 01/01/2027 – 09/30/2027

Breast Quality Improvement Initiatives for 2027

Prone positioning

Completion of arm measurements for lymphedema assessment

MR QC
BREAST WORKING GROUP

UPDATED FOR 2027

Prone Positioning

Increase the utilization of prone positioning for breast cancer radiation treatment

Now scored on **each facility's own performance** (previously collaborative-wide)

Partial breast RT is now an exclusion

FULL POINTS · 12 pts

≥20%

of patients treated prone

HALF POINTS · 6 pts

10–19%

of patients treated prone

ZERO POINTS · 0 pts

<10%

of patients treated prone

MR QC

BREAST WORKING GROUP

This measure is part of 2027 P4P|2028 Gold Card|2028 CQI VBR

NO CHANGE FOR 2027

Lymphedema Arm Measurements

Node-positive breast patients treated to regional fields:

A. ≥50% with a 2026 baseline measurement (B7/B9) have a follow-up measurement (B10/B14) completed **and reported in cm** in Q1–Q3 2027

B. ≥50% with an RT start in Q1–Q3 2027 have a baseline measurement (B7/B9) in cm and complete nodal irradiation data (nodal doses reported; contours named per TG263)

FULL POINTS · 12 pts	HALF POINTS · 6 pts	ZERO POINTS · 0 pts
A and B met	**A or B met**	**Neither met**

MRQC BREAST WORKING GROUP

This measure is part of 2027 P4P|2028 Gold Card|2028 CQI VBR

Lung Quality Improvement Initiatives for 2027

Hypofractionation Measure

Rib & Chest Wall Toxicity

MR QC
LUNG WORKING GROUP

Lung Hypofractionation (Collaborative-Wide)

UPDATED FOR 2027

For lung cancer treated with hypofractionation (6–20 fractions), MROQC Consensus Quality Guidelines are achieved collaborative-wide

Guidelines now include the **heart and proximal bronchial tree** and updated PTV constraints (2026 ASTRO guidance)

FULL POINTS · 12 pts

≥60%

median, meeting guidelines

HALF POINTS · 6 pts

50–59%

median, meeting guidelines

ZERO POINTS · 0 pts

<50%

median, meeting guidelines

This measure is part of 2027 P4P and 2028 CQI VBR

MROQC
LUNG WORKING GROUP

NEW MEASURE

Rib & Chest Wall Toxicity

Assessment of rib and chest wall toxicity following SBRT or hypofractionated lung radiation therapy

Facility-level measure; toxicity assessment data collection begins in 2027

FULL POINTS · 10 pts
≥70%
assessment completion

HALF POINTS · 5 pts
60–69%
assessment completion

ZERO POINTS · 0 pts
<60%
assessment completion

MR QC
LUNG WORKING GROUP

This measure is part of 2027 P4P|2028 Gold Card|2028 CQI VBR

NEW MEASURE

Toxicity Measure: Two Components

Both assessments count toward one combined completion rate

COMPONENT A

Chest wall pain

Required assessment on the 3-month or 6-month L9 form

+

COMPONENT B

Rib fracture

Required assessment on the Year 1 L11 form

=

COMBINED RATE

Completed A + B ÷ due A + B × 100

Counts assessments for follow-up due during the measurement period, Q1–Q3 2027

More eligible cases = more opportunity to work on this QI

This measure is part of 2027 P4P|2028 Gold Card|2028 CQI VBR

MR QC
LUNG WORKING GROUP

Bone Mets Quality Improvement Initiative for 2027

Reirradiation Documentation

MR QC
— BONE METS —

UPDATED FOR 2027

Bone Mets Reirradiation Documentation

Increase recommended documentation for bone mets patients with previous radiotherapy

All prior-RT cases: previous and current anatomical treatment sites, and treatment dates

Concern for cumulative-dose side effects: also target prescription doses, and treatment techniques and modalities

FULL POINTS · 12 pts

≥50%

of cases fully documented

HALF POINTS · 6 pts

30–49%

of cases fully documented

ZERO POINTS · 0 pts

<30%

of cases fully documented

MR QC
—BONE METS WORKING GROUP—

This measure is part of 2027 P4P|2028 Gold Card|2028 CQI VBR

Prostate Quality Improvement Initiative for 2027

MRI Registration & GTV Contouring

MR QC
— PROSTATE WORKING GROUP —

NEW MEASURE

Prostate MRI Registration & GTV

Among patients with intact prostate cancer and a PI-RADS 4/5 lesion, the MRI is registered to the CT simulation and a GTV is contoured and named per TG263

Replaces the ADT and MRI utilization measures, which move to maintenance

FULL POINTS · 12 pts	HALF POINTS · 6 pts	ZERO POINTS · 0 pts
≥20%	10–19%	<10%
of eligible patients	of eligible patients	of eligible patients

MR QC
— PROSTATE WORKING GROUP —

This measure is part of 2027 P4P|2028 Gold Card|2028 CQI VBR

CLOSE

October 30, 2026



THANK YOU FOR ATTENDING TODAY'S MEETING!

POST-MEETING SURVEY

Please take the MROQC Post-Meeting Feedback Survey



PLEASE RETURN YOUR BADGE AS YOU EXIT THE MEETING



FEBRUARY 26TH, 2027
COLLABORATIVE-WIDE MEETING

Join us via Zoom webinar for the 1st collaborative-wide meeting of 2027



THANK YOU!!!

MROQC ROQCstars:

- Patients
- Clinical Champions
- Facility Administrators
- Physicists & Dosimetrists
- Clinical Data Abstractors
- Participating Physicians
- Coordinating Center

Blue Cross Blue Shield of Michigan Value Partnerships Program

For more information: www.mroqc.org

Contact us: support@mroqc.org

@MROQCOfficial LinkedIn @MROQC