



WELCOME

May 15, 2026

Slides

- The slides for today's presentations will be made available to all MROQC members via our website next week

Issues

- Issues during the meeting? Please let a Coordinating Center Team member know!

**MEETING
HOUSEKEEPING**

SOCIAL MEDIA

Join the
conversation on by
tagging @MROQC
and using our
#MROQC25CWM
hashtag



Linked in



TODAY'S AGENDA



Radiation Oncology Billing Updates: Addressing Facility Challenges & Expert Q&A



ASTRO DVH Constraints: Performance Insights & Implications for Future Quality Measures



State of MROQC



Breakouts



BREAKOUT AGENDAS

Physicians/Administrators:

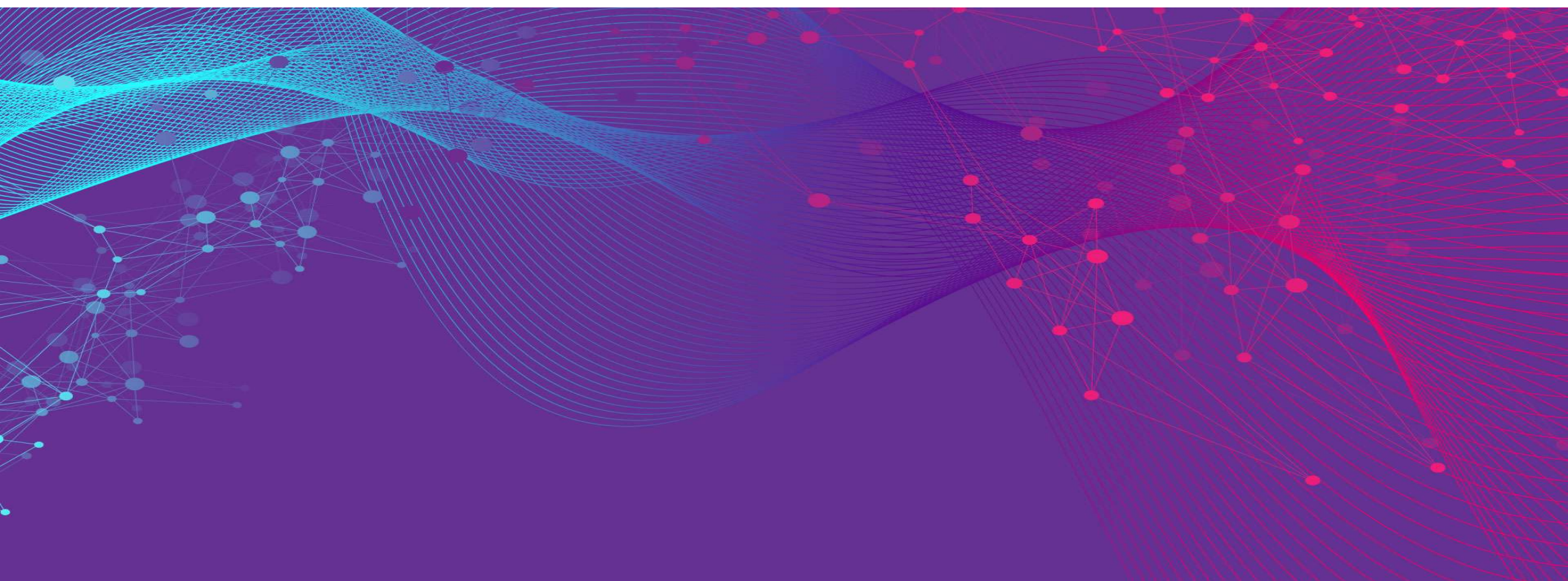
- Billing Issues
- 2027 Quality Measures

CDAs:

- Introduction to Brain Mets with Dr. Edwards
- CDA Calendar Dashboard Demo

Physics/Dosimetry:

- ASTRO DVH Constraints
- Prostate MRI Submission Pilot
- Brain Mets Physics Data Collection

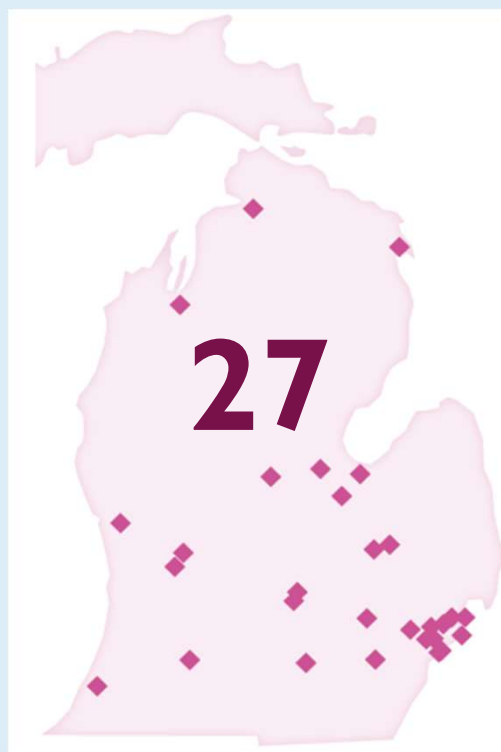


MROQC BY THE NUMBERS



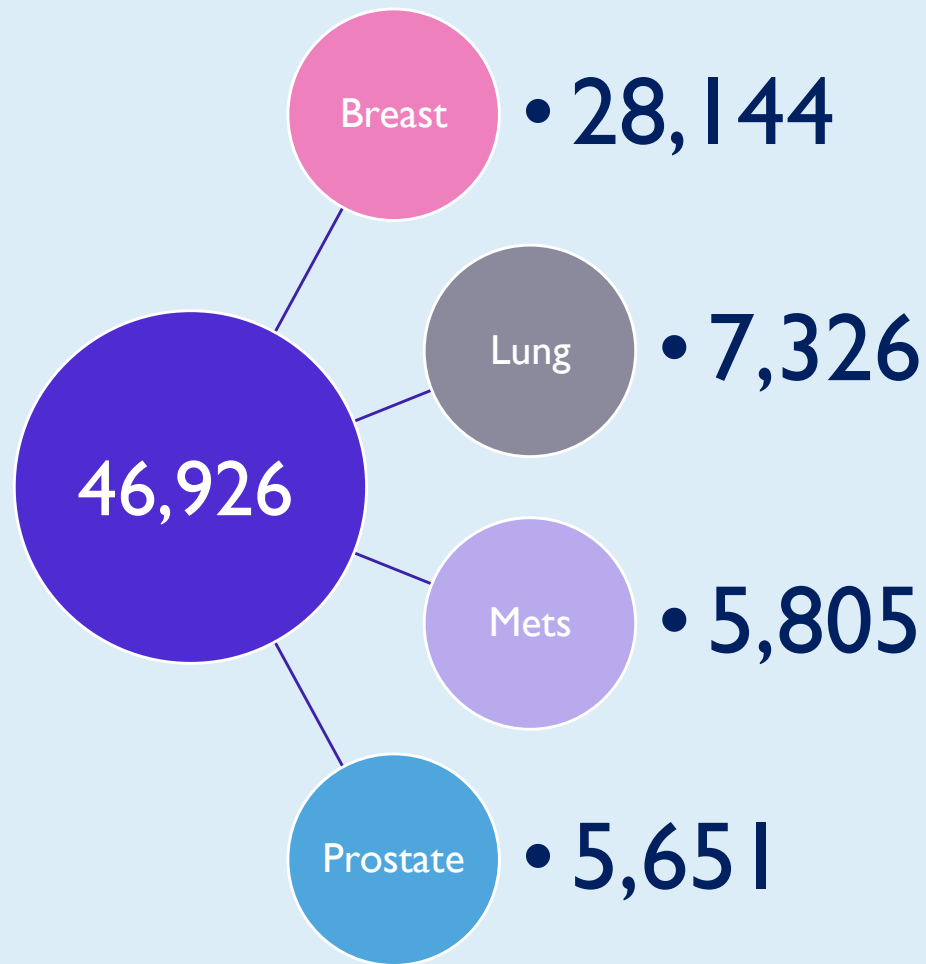
MROQC TODAY

- 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



Revised Treatment Delivery Codes

May 15, 2026



Questions

Please continue reporting issues to healthpolicy1@astro.org



ASTRO DVH CONSTRAINTS

May 15, 2026

ASTRO DVH DOSE CONSTRAINT COMPENDIUM (2025)

Overview

- ASTRO recently published a consensus compendium of DVH dose constraints for treatment planning across multiple disease sites
- Developed by disease-site expert panels using literature review and consensus methods
- Includes breast, head & neck, liver, lung, prostate, and rectal cancers

Purpose

Provide standardized dose constraints for treatment planning

Support consistent, high-quality radiation therapy delivery

Inform future quality performance indicators

POTENTIAL OPPORTUNITY FOR MROQC

Current State

Each disease-site working group has reviewed preliminary results for ASTRO DVH constraints for specific fractionations to determine:

- Which constraints can be evaluated using existing MROQC data
- Whether any constraints could serve as future MROQC quality measures

Next Steps

Review and discuss as a large group today

Identify 1–2 potential constraints for exploratory analysis in MROQC data



LUNG |

LUNG DVH CONSTRAINTS

The compendium includes dose constraints for common lung fractionation regimens, including:

Conventional fractionation (60–70 Gy)

Moderately hypofractionated regimens

Ultrahypofractionated / SBRT regimens

Constraints include **organs at risk (OARs)** such as:

Lung (V20, V5, mean lung dose)

Esophagus

Heart

Spinal canal

Brachial plexus

Chest wall / ribs

These constraints are intended to guide **treatment planning optimization** and **reduce toxicity risk**.

Table 11 Lung: conventionally fractionated regimens (1.8-2 Gy per fraction to 60-70 Gy)

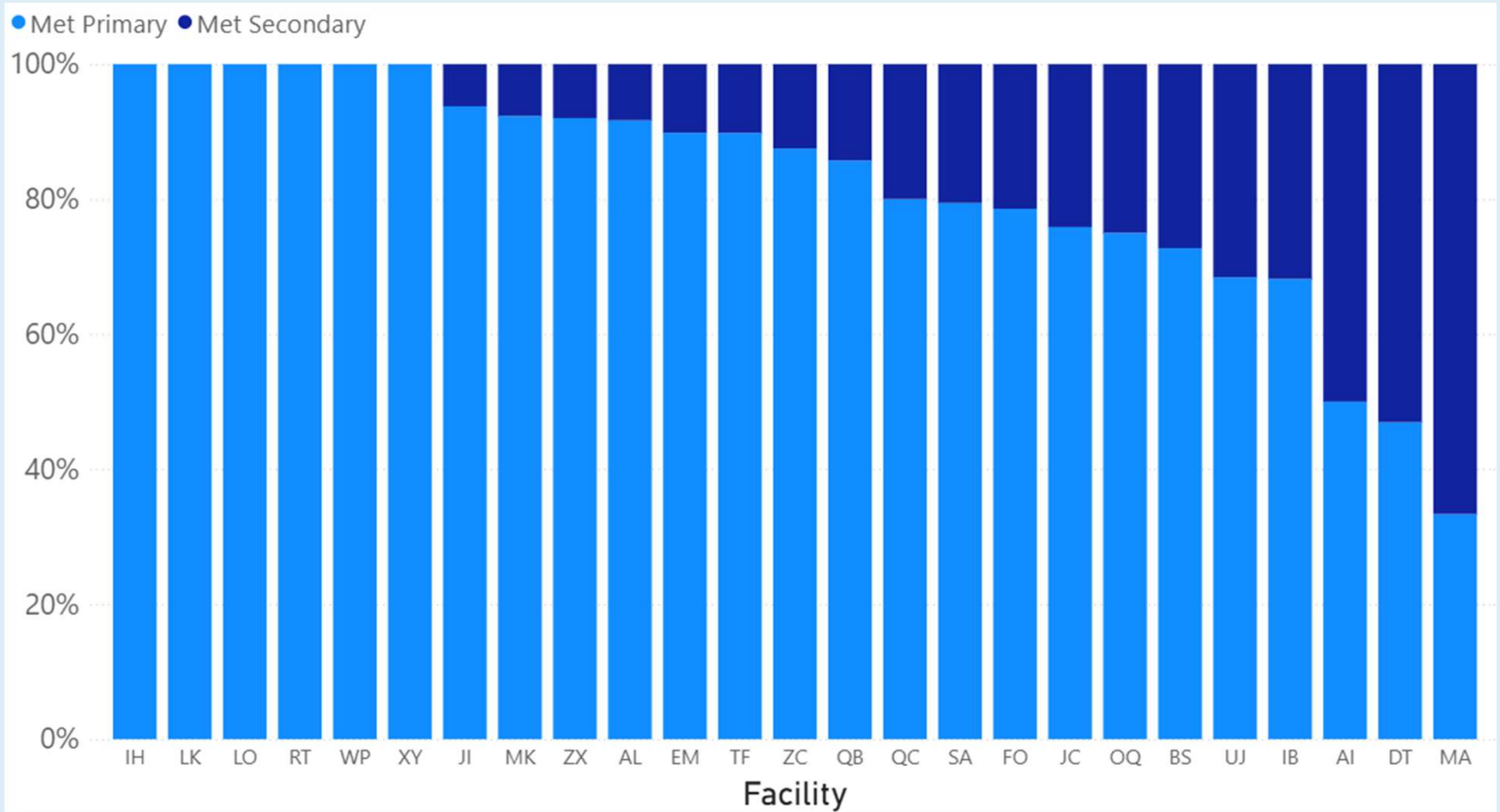
Organ/target	Metric	Primary goal	Secondary goal	Deviation	Notes
Esophagus ^{2,44-47}	D0.03cc	≤105%	≤74 Gy	>74 Gy	
	V60Gy	≤15.3%*	≤17%	>17%	
	Mean	≤30.6 Gy*	≤34 Gy	>34 Gy	
Heart ²	V45Gy	≤35%	≤40%	>40%	
Lungs ^{44,47,49}	V20Gy	≤33%*	≤37%	>37%	Lungs – GTV/iGTV
	V5Gy	≤60%	≤70%	>70%	
	Mean	≤18 Gy*	≤22 Gy	>22 Gy	
SpinalCanal ^{44,47}	D0.03cc	≤50.5 Gy	≤52 Gy	>52 Gy	
PTV ^{44,47}	D95%	100%	≥95%	<95%	

Abbreviations: D = dose; GTV = gross tumor volume; iGTV = internal gross target volume; PTV = planning target volume; V = volume.
 *Panel consensus.

CONVENTIONALLY FRACTIONATED (I PLAN, 2022-PRESENT)

Organ/Target	Metric	Primary %	Secondary %	Deviation %	N
Esophagus	D0.03cc	81.9%	100.0%	0.0%	669
	V60Gy	91.8%	94.6%	5.4%	669
	Mean	96.6%	99.6%	0.4%	669
Heart	V45Gy	100.0%	100.0%	0.0%	669
Lungs	V20Gy	86.3%	98.8%	1.2%	657
	V5Gy	58.3%	85.8%	14.2%	657
	Mean	88.0%	99.7%	0.3%	657
Spinal canal	D0.03cc	99.9%	99.9%	0.1%	668
PTV	D95%	90.3%	99.0%	1.0%	659

Organ/target	Metric	Primary goal	Secondary goal	Deviation
Esophagus	D0.03cc	≤105%	≤74 Gy	>74 Gy



Organ/target	Metric	Primary goal	Secondary goal	Deviation
Esophagus	D0.03cc	≤105%	≤74 Gy	>74 Gy

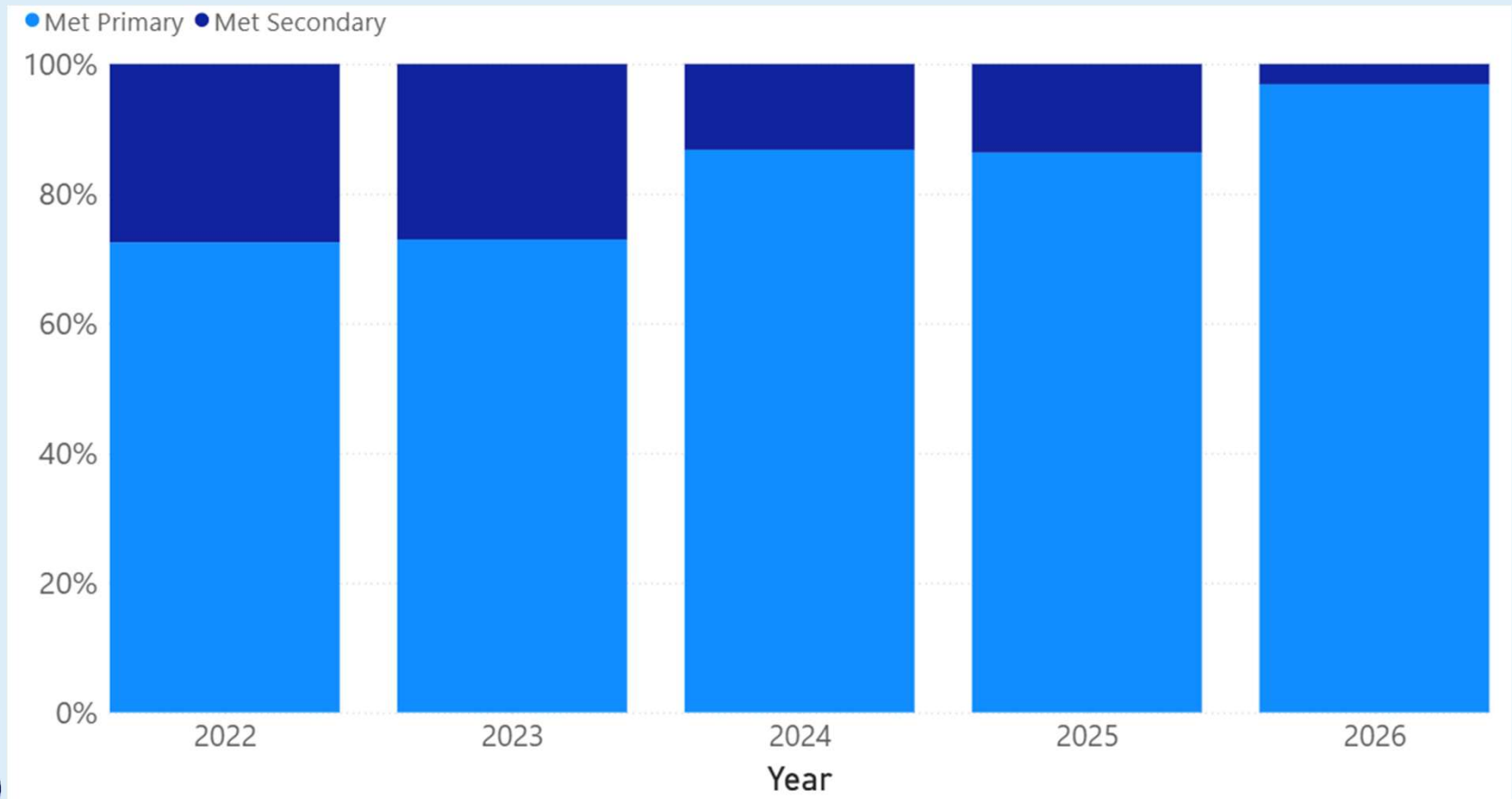


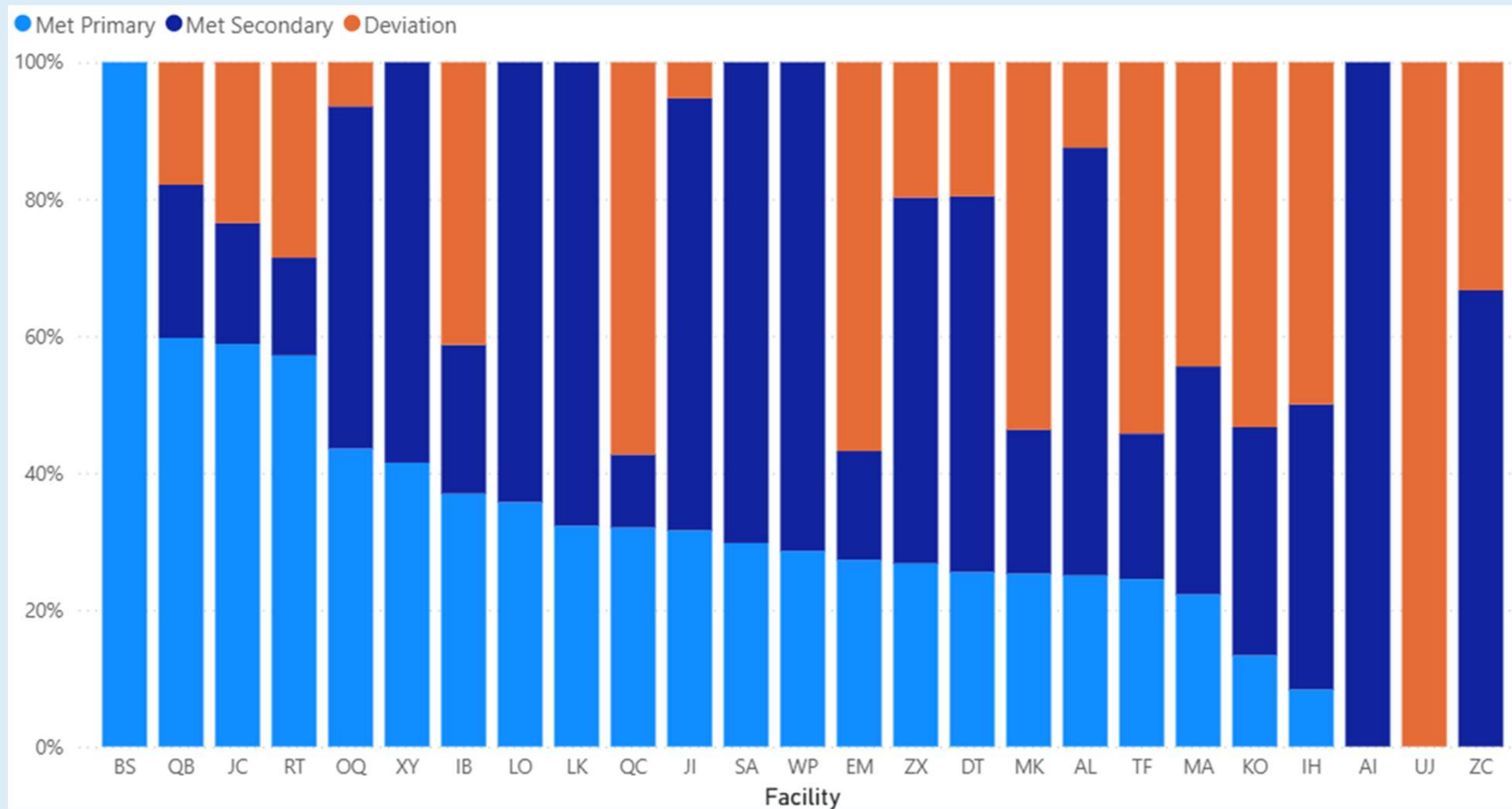
Table 15 Lung: ultrahypofractionated 5 fraction regimens (10-12 Gy per fraction to 50-60 Gy)

Organ/target	Metric	Primary goal	Secondary goal	Deviation	Notes
BrachialPlex ^{39,45,54,55}	D0.035cc	≤32 Gy		>32 Gy	
Bronchus ^{3,5,39}	D0.035cc	≤40 Gy	≤105%	>105%	Bronchial tree/smaller airways
	D0.5cc	≤21 Gy		>21 Gy	
Chestwall ^{35,39,40,52}	D0.035cc	≤50 Gy*	≤57 Gy	>57 Gy	
	V30Gy	≤30 cc	≤70 cc	>70 cc	
Esophagus ^{3,5,39}	D0.035cc	≤38 Gy	≤105%	>105%	
	D5cc	≤19.5 Gy		>19.5 Gy	
GreatVes ^{39,45,55}	D0.035cc	≤105%		>105%	
Heart ^{3,5,39,55}	D0.035cc	≤38 Gy	≤105%	>105%	
	D15cc	≤32 Gy		>32 Gy	
Lungs ^{3,4,55}	V20Gy	≤10%	≤15%	>15%	Lungs – GTV/iGTV
	Mean	≤8 Gy		>8 Gy	
SpinalCanal ^{5,39}	D0.035cc	≤28 Gy		>28 Gy	
PTV	D95%	100%*	≥99%*	<99%*	Peripheral or central lesions
	D99%	≥90%*	≥85%*	<85%*	

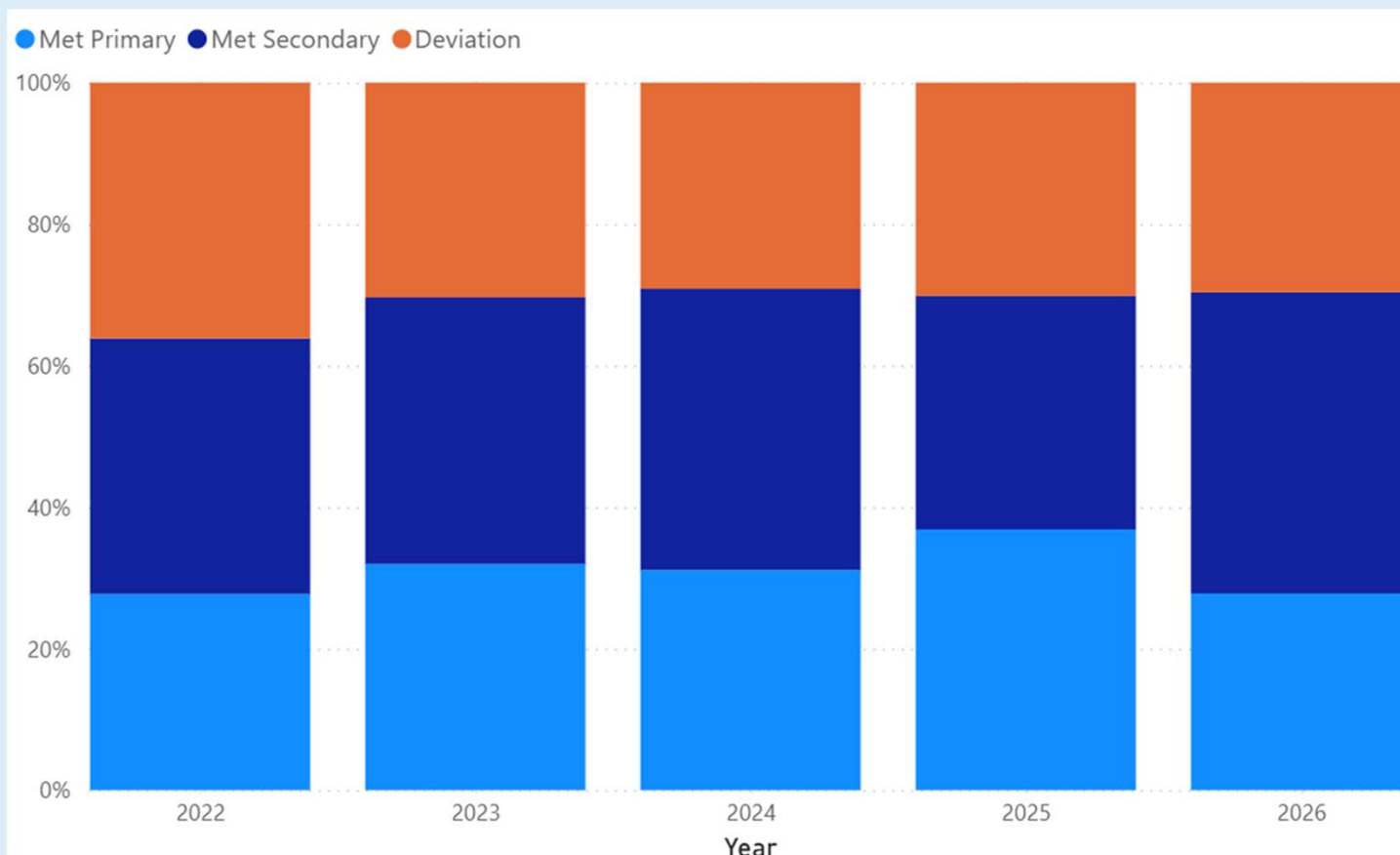
5-FRACTION SBRT (2022-PRESENT)

Organ/Target	Metric	Primary %	Secondary %	Deviation %	N
Brachial plexus	D0.035cc	99.2%	N/A	0.8%	379
Bronchus	D0.035cc	96.8%	96.8%	3.2%	251
	D0.5cc	90%	N/A	10%	251
Chest wall	D0.035cc	32.4%	69.3%	30.7%	873
	V30Gy	80.8%	97.4%	2.6%	873
Esophagus	D0.035cc	99.3%	99.3%	0.7%	1063
	D5cc	99.7%	N/A	0.3%	1063
Great vessels	D0.035cc	98.2%	N/A	1.8%	649
Heart	D0.035cc	97.4%	99.7%	0.3%	1064
	D15cc	99.9%	N/A	0.1%	1064
Normal lung	V20Gy	98.5%	99.7%	0.3%	1028
	Mean	99.5%	N/A	0.5%	1031
Spinal canal/cord	D0.035cc	100%	N/A	0%	1062
PTV	D95%	93.2%	94.3%	5.7%	1041
	D99%	95.9%	97.1%	2.9%	1041

Organ/target	Metric	Primary goal	Secondary goal	Deviation
Chest wall	D0.035cc	≤50 Gy	≤57 Gy	>57 Gy



Organ/target	Metric	Primary goal	Secondary goal	Deviation
Chest wall	D0.035cc	≤50 Gy	≤57 Gy	>57 Gy



DISCUSSION

Which DVH constraints are most clinically meaningful?

How do we view performance on constraints such as chest wall near-max dose?

What tradeoffs are involved in selection of fractionation and planning goals?

What constraints may be suitable for collaborative quality measures?



BREAST |

BREAST DVH CONSTRAINTS

The compendium includes dose constraints for common breast fractionation regimens, including:

Conventional (with nodes)

Moderately hypofractionated (with nodes and without nodes)

Ultrahypofractionated regimens (WBI and PBI)

Constraints include targets and OARs such as:

Breast target coverage and near max dose

Lung volume metrics

Heart mean dose and volume metrics

Nodal region target coverage and near max dose

These constraints are intended to guide **treatment planning optimization** and **reduce toxicity risk**.

Table 2 Breast/chest wall without regional lymph nodes: moderately hypofractionated 15 or 16 fraction regimens (2.66-2.67 Gy per fraction to 40.05-42.56 Gy)

Organ/target	Laterality	Metric	Primary goal	Secondary goal	Deviation	Notes
Breast (Contralateral)	Left/right	D5%	≤1.44 Gy*	≤2.4 Gy*	>2.4 Gy*	
Heart ²⁰	Left	Mean	≤1.6 Gy	≤2.4 Gy	>2.4 Gy*	
	Right	Mean	≤0.8 Gy	≤1.6 Gy	>1.6 Gy	
Lung ²⁰⁻²²	(Contralateral)	V4Gy	≤10%	≤15%	>15%	
	(Ipsilateral) ^{20,22}	V16Gy	≤15%	≤20%	>20%	
Breast/chestwall ^{†19}	Left/right	Rx dose	V95% ≥95%	V90% ≥90%	V90% <90%	Field volume may substitute for contoured PTV
	Left/right	D0.03cc	≤110%*	≤115%*	>115%*	
	Left/right	V107%	≤10 cc		>10 cc	

Abbreviations: D = dose; PTV = planning target volume; Rx = prescription; V = volume.
*Panel consensus.
†Goals do not include dose contribution from a boost (eg, lumpectomy cavity boost).

MEAN HEART DOSE METRICS (NODE NEGATIVE AWBI)

Year(s)	Target	Metric	Measure Description
2016–2018	90%	≤ 2 Gy	Mean heart dose for 90% of node-negative breast patients
2019	75%	Left ≤ 1.2 Gy Right ≤ 0.7 Gy	Mean heart dose achieved in breast patients not receiving radiotherapy to regional nodes
2020	85%		
2021	85%	Left: ≤ 1.2 Gy Right: ≤ 0.7 Gy	For node-negative breast cancer patients, $\geq 95\%$ of the lumpectomy cavity PTV receives $\geq 95\%$ of the whole breast prescription dose AND the heart mean dose meets threshold appropriate to laterality and fractionation
2022	80%	Left: ≤ 1 Gy	For node-negative breast cancer patients, $\geq 95\%$ of the lumpectomy cavity PTV receives $\geq 95\%$ of the whole breast prescription dose AND the heart mean dose is ≤ 1.0 Gy for left-sided cases receiving moderate dose hypofractionation. (Only applies for breast volumes less than 1500 cc in 2023)
2023	70%		

MODERATELY HYPOFRACTIONATED, WITHOUT NODES (2022-PRESENT)

Organ/Target	Metric	Primary %	Secondary %	Deviation %	N
Heart, left	Mean	99.6	99.9	0.1	1657
Heart, right	Mean	99.5	100.0	0.0	1603
Ipsilateral lung	V16Gy	88.9	98.4	1.6	3255
Breast	Rx Dose	83.2	90.8	9.2	3180
	D0.03cc	98.6	99.9	0.1	3180
	V107%	92.6	—	7.4	3180

Table 3 Breast/chest wall with regional lymph nodes: moderately hypofractionated 15 or 16 fraction regimens (2.66-2.67 Gy per fraction to 40.05-42.56 Gy)

Organ/target	Laterality	Metric	Primary goal	Secondary goal	Deviation	Notes
Heart ¹⁹	Left	Mean	≤3 Gy	≤5 Gy	>5 Gy	
	Right	Mean	≤1.6 Gy*	≤2.4 Gy*	>2.4 Gy*	
Lung ¹⁹ (Ipsilateral)	Left/right	V18Gy	≤35%	≤40%	>40%	
	Left/right	V10Gy	≤60%*		>60%*	
Breast/Chestwall ^{†19}	Left/right	Rx dose	V95% ≥95%	V90% ≥90%	V90% <90%	Field volume may substitute for contoured PTV
	Left/right	D0.035cc	≤110%*	≤115%*	>115%*	
	Left/right	V107%	≤10 cc		>10 cc	
LN_Sclav ¹⁹	Left/right	Rx dose	V95% ≥95%	V90% ≤90%	V90% <90%	
	Left/right	D0.035cc	≤110%*	≤115%*	>115%*	
LN_Ax ¹⁹	Left/right	Rx dose	V95% ≥95%	V90% ≥90%	V90% <90%	
	Left/right	D0.035cc	≤110%*	≤115%*	>115%*	
LN_IMN ¹⁹	Left/right	V90%	≥90%	≥80%	<80%	
	Left/right	D0.035cc	≤110%*	≤115%*	>115%*	

MODERATELY HYPOFRACTIONATED, WITH NODES (2022-PRESENT)

Organ/Target	Metric	Primary %	Secondary %	Deviation %	N
Heart, left	Mean	98.2	100.0	0	109
Heart, right	Mean	98.3	100.0	0	115
Ipsilateral lung	V18Gy	95.5	100.0	0	224
	V10Gy	99.6	—	0.4	224
Breast	Rx dose	83.7	91.9	8.1	221
	D0.035cc	92.8	98.2	1.8	221
	V107%	85.5	—	14.5	221
Sclav	Rx dose	54.8	91.4	8.6	104
	D0.035cc	64.4	95.2	4.8	104
IMN	V90%	59.6	70.2	29.8	94
	D0.035cc	75.5	79.8	20.2	94

DISCUSSION

How should we evaluate heart dose constraints from ASTRO vs. those established by MROQC?

How should we interpret results for nodal target structures?

What constraints may be suitable for collaborative quality measures?



PROSTATE |

PROSTATE DVH CONSTRAINTS

The compendium includes dose constraints for common prostate fractionation regimens, including:

Conventional fractionation (74-81 Gy)

Moderately hypofractionated regimens (20 or 28 fractions)

Ultrahypofractionated / SBRT regimens

Constraints include **organs at risk (OARs)**:

Bladder

Rectum

Others (not required by MROQC):

- Bowel_Large
- Bowel_Small
- Femur_Head
- PenileBulb
- Urethra

These constraints are intended to guide **treatment planning optimization** and **reduce toxicity risk**.

MODERATELY HYPOFRACTIONATED (28 FRACTIONS)

Table 21 Prostate: moderately hypofractionated 28 fraction regimen (2.5 Gy per fraction to 70 Gy)

Organ/target	Metric	Primary goal	Secondary goal	Deviation	N
Bladder ^{65,67-69,71}	V70Gy	≤10%	≤15%	>15%	
	V65Gy	≤15%	≤25%	>25%	
	V40Gy	≤35%	≤65%	>65%	
Bowel_Large ^{65,68}	D0.035cc	≤55 Gy	≤60 Gy	>60 Gy	
	V50Gy	≤1%*	>1%*		
Bowel_Small ^{67,71}	D0.035cc	≤52.5 Gy	≤54 Gy	>54 Gy	
	V40Gy	≤1%	>1%		
Femur_Head ⁷¹	V40Gy	0%		>0%	
PenileBulb ⁷¹	Mean	<50 Gy		≥50 Gy	P
Rectum ^{67-69,71}	V70Gy	≤5%	≤10%	>10%	
	V65Gy	≤10%		>10%	
	V40Gy	≤35%		>35%	
PTV	V100%	≥95%*	≥90%*	<90%*	
	D2%	≤110%*	≤115%*	>115%*	

Abbreviations: D = dose; PTV = planning target volume; V = volume.
*Panel consensus.

Contour	Metric	Primary %	Secondary %	Deviation %	N
Bladder	V70Gy	90.6%	97.5%	2.5%	1411
	V65Gy	90.7%	98.7%	1.3%	1411
	V40Gy	75.6%	97.7%	2.3%	1411
Rectum	V70Gy	87.9%	99.0%	1.0%	1413
	V65Gy	88.4%	-	11.6%	1413
	V40Gy	85.5%	-	14.5%	1413
PTV	V100%	74.4%	95.9%	4.1%	1382
	D2%	85.6%	89.9%	10.1%	1382

MODERATELY HYPOFRACTIONATED (20 FRACTIONS)

Table 20 Prostate: moderately hypofractionated 20 fraction regimen (3 Gy per fraction to 60 Gy)

Organ/target	Metric	Primary goal	Secondary goal	Deviation
Bladder ^{64,65,69}	V60Gy	≤5%	≤15%	>15%
	V48Gy	≤25%		>25%
	V40Gy	≤50%		>50%
Bowel_Large ⁶⁵	D0.03cc	≤50 Gy		>50 Gy
Bowel_Small ^{64,68}	D0.03cc	≤50 Gy*		>50 Gy*
	V40Gy	≤17 cc	≤195 cc	>195 cc
Femur_Head ⁶⁴	V40Gy	≤5%	≤50%	>50%
PenileBulb ⁶⁴	V48Gy	≤10%		>10%
Rectum ^{67,69,70}	V60Gy	≤0.01%	≤8%	>8%
	V50Gy	≤22%		>22%
	V30Gy	≤57%		>57%
PTV	V100%	≥95%*	≥90%*	<90%*
	D2%	≤110%*	≤115%*	>115%*

Abbreviations: D = dose; PTV = planning target volume; V = volume.
*Panel consensus.

Contour	Metric	Primary %	Secondary %	Deviation %	N
Bladder	V60Gy	63.3%	99.7%	0.3%	338
	V48Gy	97.6%	-	2.4%	338
	V40Gy	96.4%	-	3.6%	338
Rectum	V60Gy	2.4%	95.3%	4.7%	339
	V50Gy	99.4%	-	0.6%	339
	V30Gy	91.4%	-	8.6%	339
PTV	V100%	55.0%	86.1%	13.9%	331
	D2%	78.5%	92.4%	7.6%	331

DISCUSSION

What is the relationship between dosimetric constraints on OARs and treatment quality?

What OAR constraints and PTV coverage goals would be better surrogates for plan quality?

How should MROQC approach target coverage goals?

What would be meaningful improvement for prostate cancer patients?

BREAK

Let's take a quick
break to stretch and
prepare for the State
of MROQC

Take 5 minutes

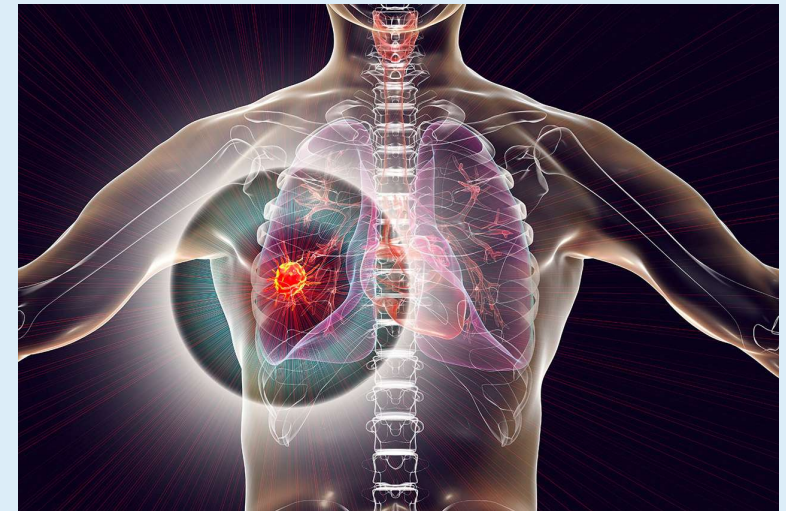


STATE OF MROQC



MROQC Lung Quality Improvement Working Group Update

May 15, 2026



Shruti Jolly, Garth Tormoen, Martha Matuszak



Today's Agenda



WORKING GROUP
STATUS UPDATES



EXPANDED TOXICITY
COLLECTION

Lung Working Group Status Updates: Enrollment



ENROLLMENT FOR LUNG PROJECT

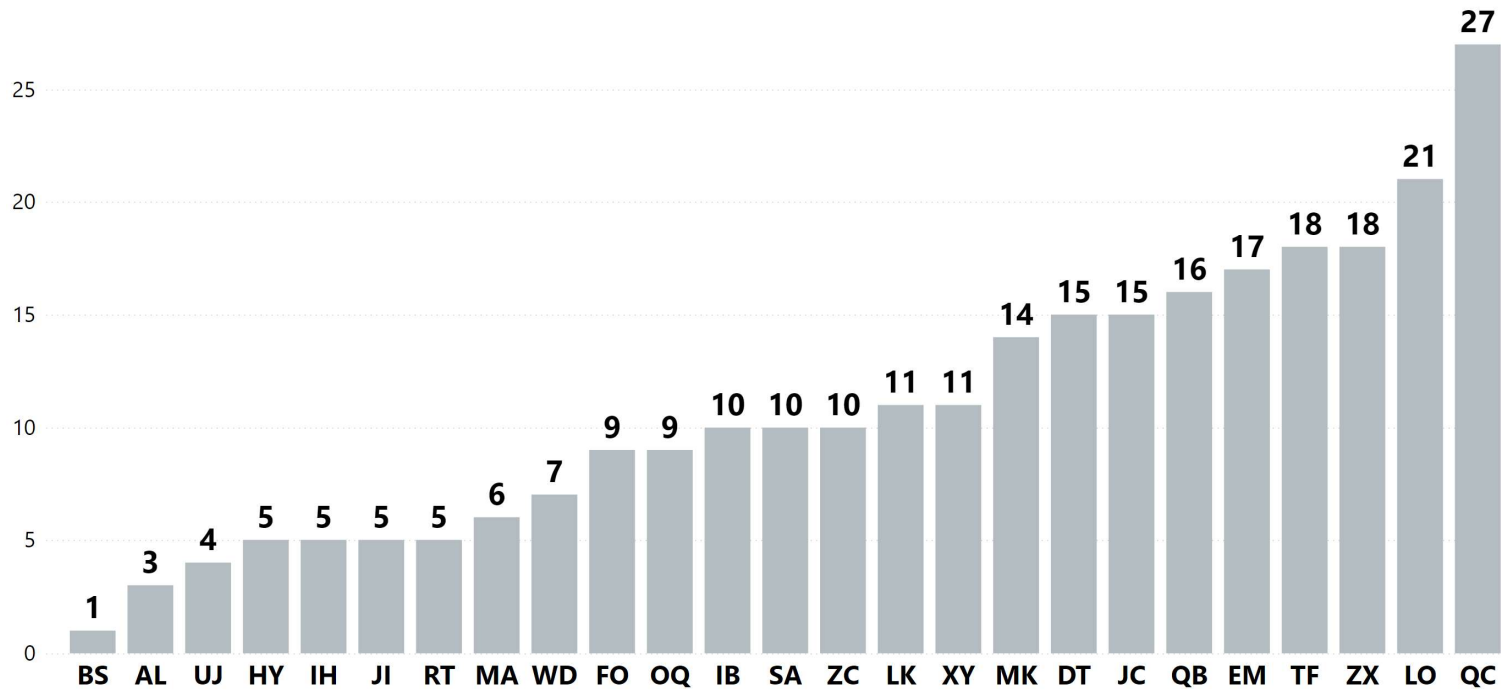
Data as of 5/1/2026



ENROLLMENT BY FACILITY

Facilities with no data

AI
WP

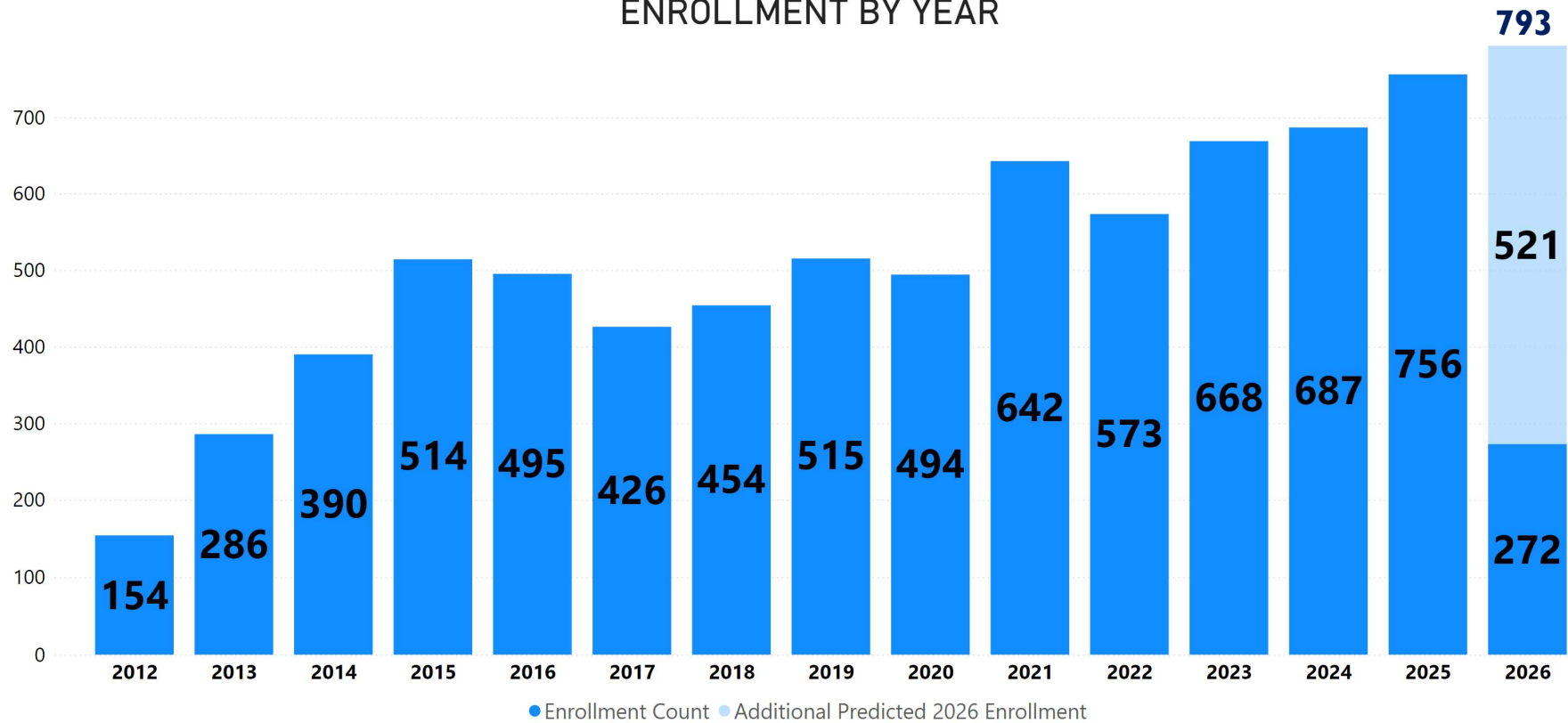


ENROLLMENT FOR LUNG PROJECT

Data as of 5/1/2026



ENROLLMENT BY YEAR

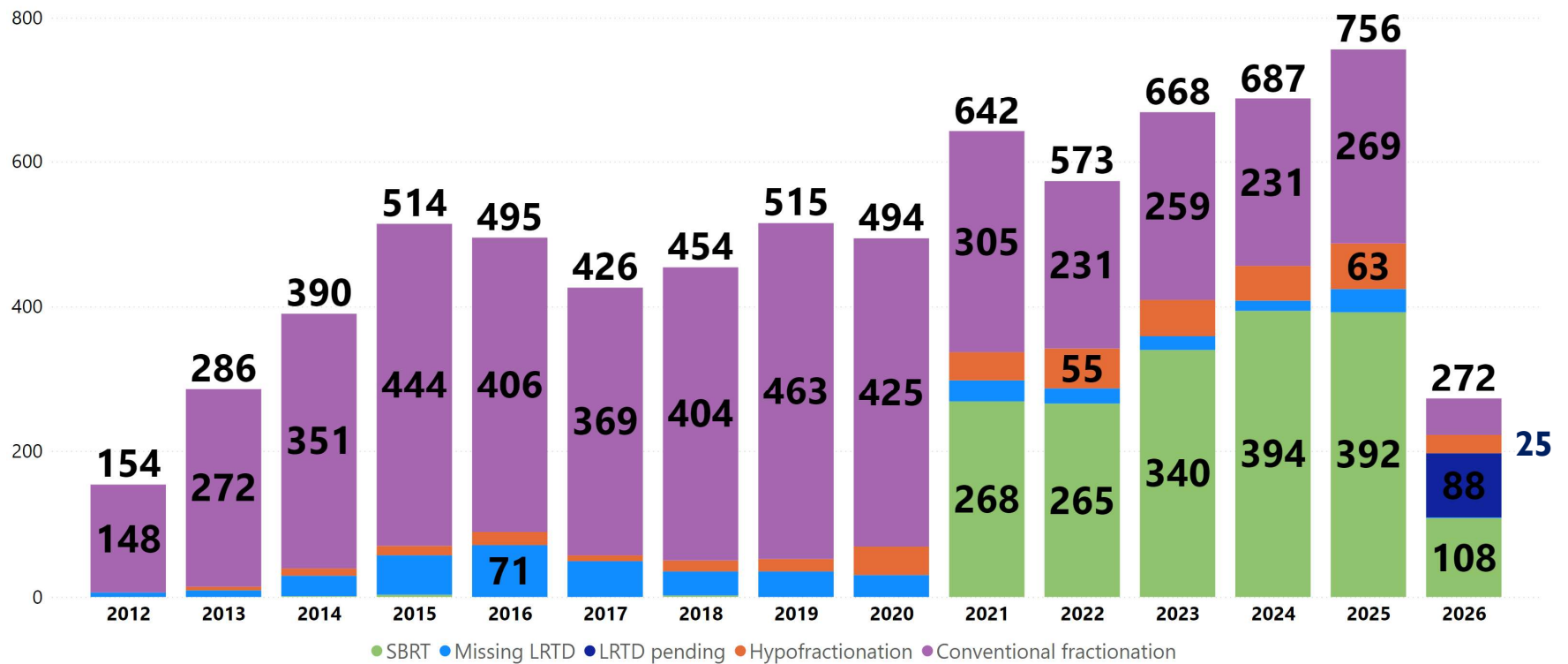


ENROLLMENT FOR LUNG PROJECT

Data as of 5/1/2026



ENROLLMENT BY YEAR



Lung Working Group Status Update: Quality Measure Performance



2026 Lung Collaborative-Wide Measure

For treatment of lung cancer with hypofractionation (6-20 fractions), MROQC Consensus Quality Guidelines are achieved for at least 75% of patients collaborative-wide.

- | | |
|-----------|--|
| 10 Points | ≥75% of patients treated with hypofractionation (6-20 fx) for lung cancer across MROQC achieved the phase I guideline fractionation & dosimetric goals |
| 5 Points | 60-74% of patients treated with hypofractionation (6-20 fx) for lung cancer across MROQC achieved the phase I guideline fractionation & dosimetric goals |
| 0 Points | <60% of patients treated with hypofractionation (6-20 fx) for lung cancer across MROQC achieved the phase I guideline fractionation & dosimetric goals |



This measure is part of 2026 P4P and 2027 CQIVBR

MROQC Lung Hypofractionation Guideline Adherence

Lung Hypofractionation Guidelines Measure

The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

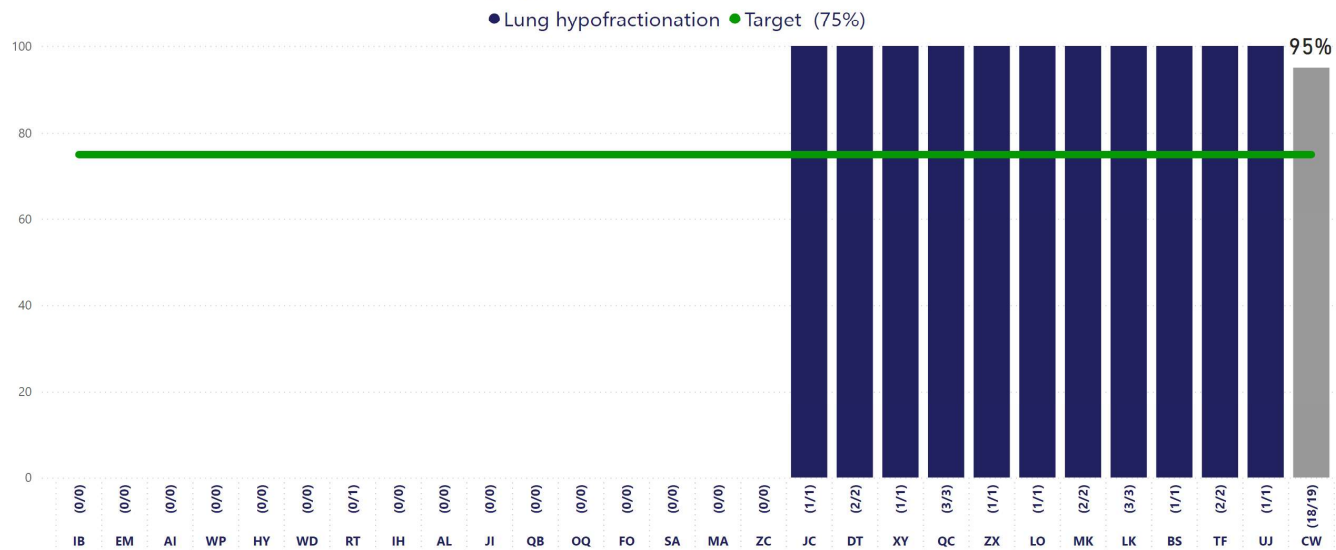
Data Refreshed as of 05/01/2026

Measure Description:

For treatment of lung cancer with hypofractionation (6-20 fractions), MROQC Consensus Quality Guidelines are achieved.

Full points: >=75% of patients treated with hypofractionation (6-20 fx) for lung cancer across MROQC achieved the phase 1 guideline fractionation & dosimetric goals
 Partial Points: 60-74% of patients treated with hypofractionation (6-20 fx) for lung cancer across MROQC achieved the phase 1 guideline fractionation & dosimetric goals
 Zero Points: <60% of patients treated with hypofractionation (6-20 fx) for lung cancer across MROQC achieved the phase 1 guideline fractionation & dosimetric goals

Lung Hypofractionation Quality Guidelines



Hypofx Quality Measure Roadmap

Phase 1

Follow High Priority/High Consensus Goals for Fractionation and Dosimetric Limits Consortium Wide

8, 10, or 15-20 Fx

PTV

Esophagus

Bronchus/Trachea

Cord

Phase 2

Follow Consensus Goals for Fractionation, Tradeoffs, and Dosimetric Limits at a facility level or consortium wide, depending on Phase 1

MROQC Lung Hypofractionation Guidelines (2026)

Goal

Standardize lung hypofractionation practices across MROQC facilities

Appropriate Use

- Stage I–II patients not ideal for SBRT
- Select Stage III patients not eligible for chemotherapy

Phase I Recommendation

Use 8, 10, or 15 fractions for hypofractionation as an SBRT alternative

Planning Priorities

1. Meet critical OAR constraints
2. Maintain PTV coverage/conformity
3. Minimize secondary OAR dose

Key Dosimetric Themes

- PTV D95% = 100%
- Prioritize spinal cord, esophagus, brachial plexus, heart, and airway constraints
- Lung dose kept **ALARA**

Foundation

Built from:

- Existing MROQC practice patterns
- Lung WG consensus
- NRG Oncology guidance

Consensus recommendations will evolve with future evidence and MROQC experience.

Questions
regarding the
current lung
measure?



Expanded Toxicity Collection



Data Collection Addition for Hypofractionated Lung Treatments

Background

- A request has been made to consider adding toxicities related to hypofractionated lung treatments
- NRG does not have a robust dataset in this space

Outcome of Interest

- Rib/chest wall pain identified as a potentially important outcome
- Particularly relevant for SBRT and other hypofractionated treatments

Rationale

- Rib/chest wall toxicity is a known risk with high-dose per fraction regimens
- Additional data may help better understand treatment-related toxicity patterns

We are proposing two new questions:

Did the patient develop chest wall pain attributable to radiation?

Chest Wall Pain (CTCAE graded)

- None
- Grade 1 – mild
- Grade 2 – moderate (limits instrumental ADLs)
- Grade 3+ – severe

Did the patient develop a rib fracture within the radiation field?

- No
- Yes – asymptomatic
- Yes – symptomatic

Join Us!

Our Next Lung Working Group Meeting:
Monday, June 15th from 12:00-1:00p.m.



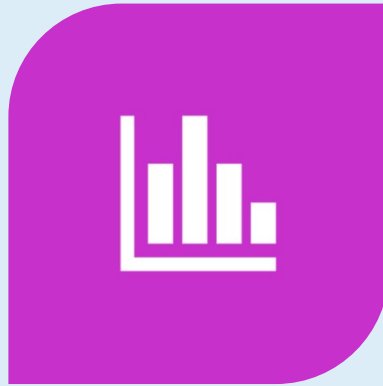
MROQC Quality Improvement Breast Working Group Update

May 15, 2026

Lori Pierce, Frank Vicini, Alex Moncion



Today's Agenda



WORKING GROUP
STATUS UPDATES



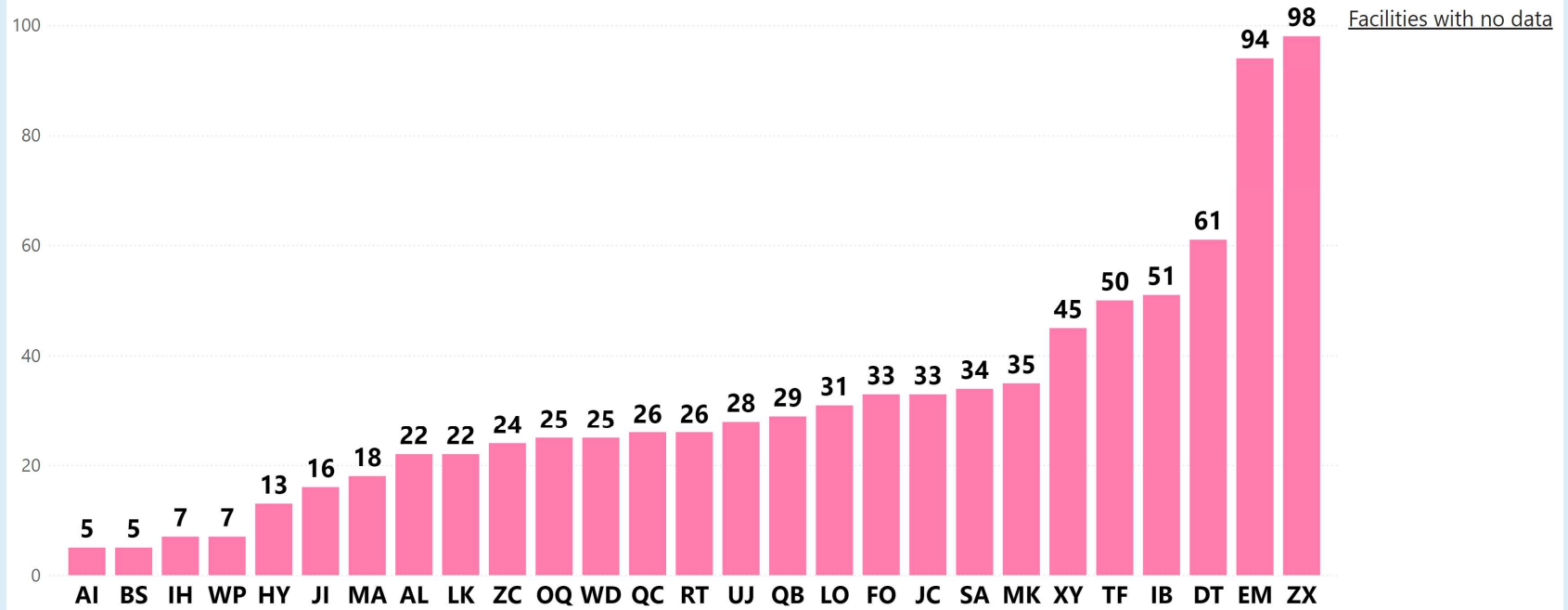
FUTURE PROJECT
UPDATES

ENROLLMENT FOR BREAST PROJECT

Data as of 5/1/2026



ENROLLMENT BY FACILITY

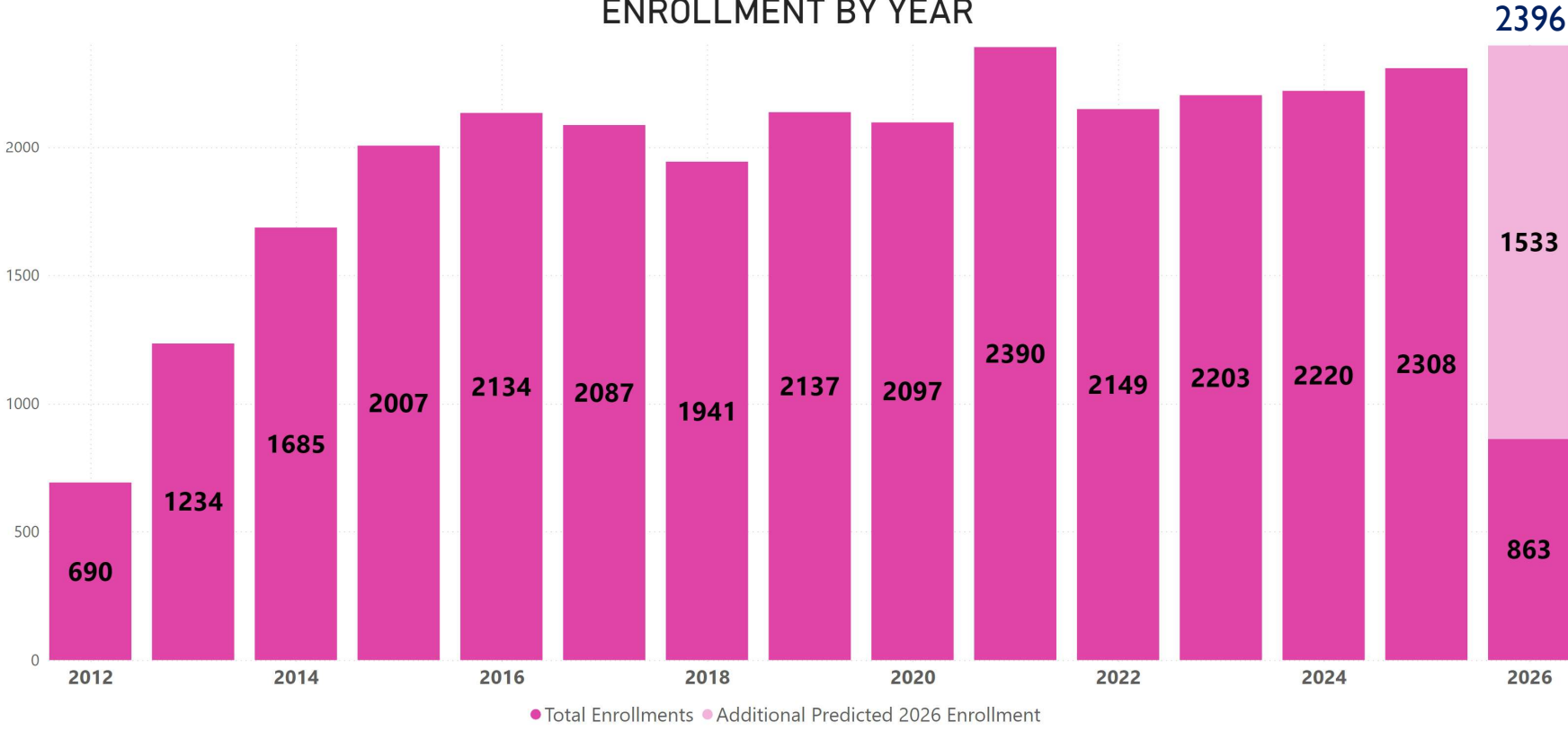


ENROLLMENT FOR BREAST PROJECT

Data as of 5/1/2026



ENROLLMENT BY YEAR



Breast treatment techniques in MROQC over time



Breast Quality Improvement Initiatives



Prone positioning

Completion of arm
measurements for
lymphedema
assessment

2026 MROQC Collaborative-Wide Goal

Increase the collaborative-wide utilization of prone positioning for breast cancer radiation treatment

10 Points	$\geq 40\%$ of breast cancer patients were treated in the prone position across MROQC
5 Points	30-39% of breast cancer patients were treated in the prone position across MROQC
0 Points	$< 30\%$ of breast cancer patients were treated in the prone position across MROQC

This measure is part of 2026 P4P and 2027 CQIVBR

Motivation for the Prone Positioning Measure

Population:

- Left-sided, hypofractionated (2.5-2.7 Gy/fx) whole breast (boost not included in analysis if present) treated between 2018-2022.

Metrics:

- Tumor bed PTV: D95%[%] ≥ 95
- Heart: Mean[Gy] ≤ 1

To be eligible:

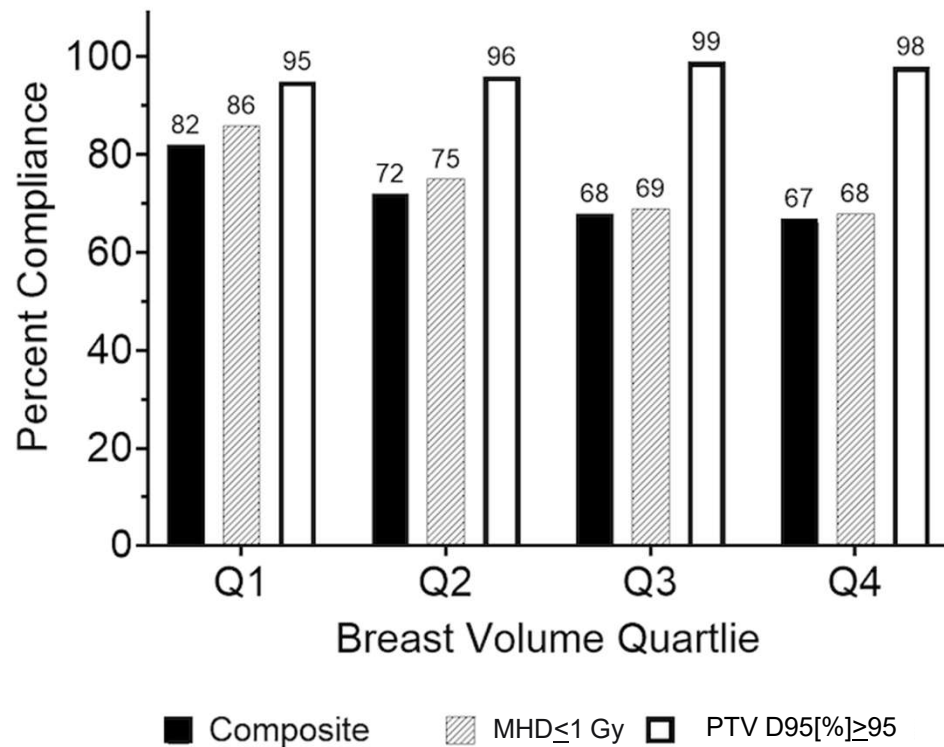
- Must have TG263 compliant heart and PTV surgical bed structures
- Multiple whole breast plans are excluded

Resulting Sample Size:

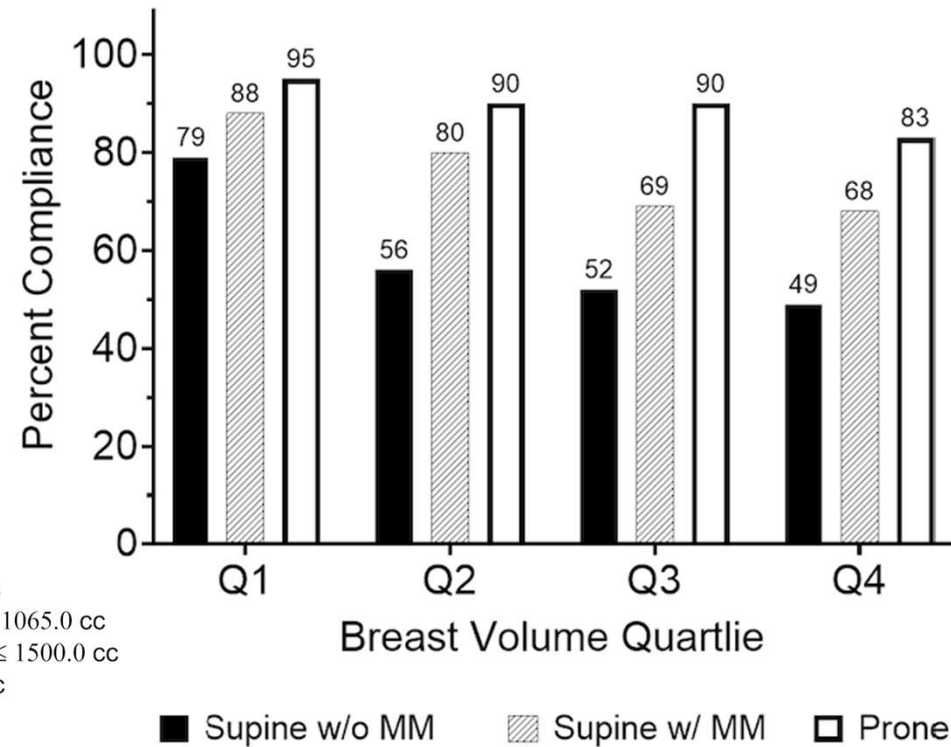
- N=2,492
 - Supine Without Motion Management (w/o MM): 726
 - Supine With Motion Management (w/ MM): 1,178
 - Prone: 588

Motivation for the Prone Positioning Measure

A Performance Metric Compliance Rate



B MHD Compliance Rate by Patient Treatment Position (MHD ≤ 1 Gy)



Q1: ≤ 720.0 cc
 Q2: 720.1 to ≤ 1065.0 cc
 Q3: 1065.1 to ≤ 1500.0 cc
 Q4: 1500.1+ cc

Prone Positioning Quality Measure for Breast

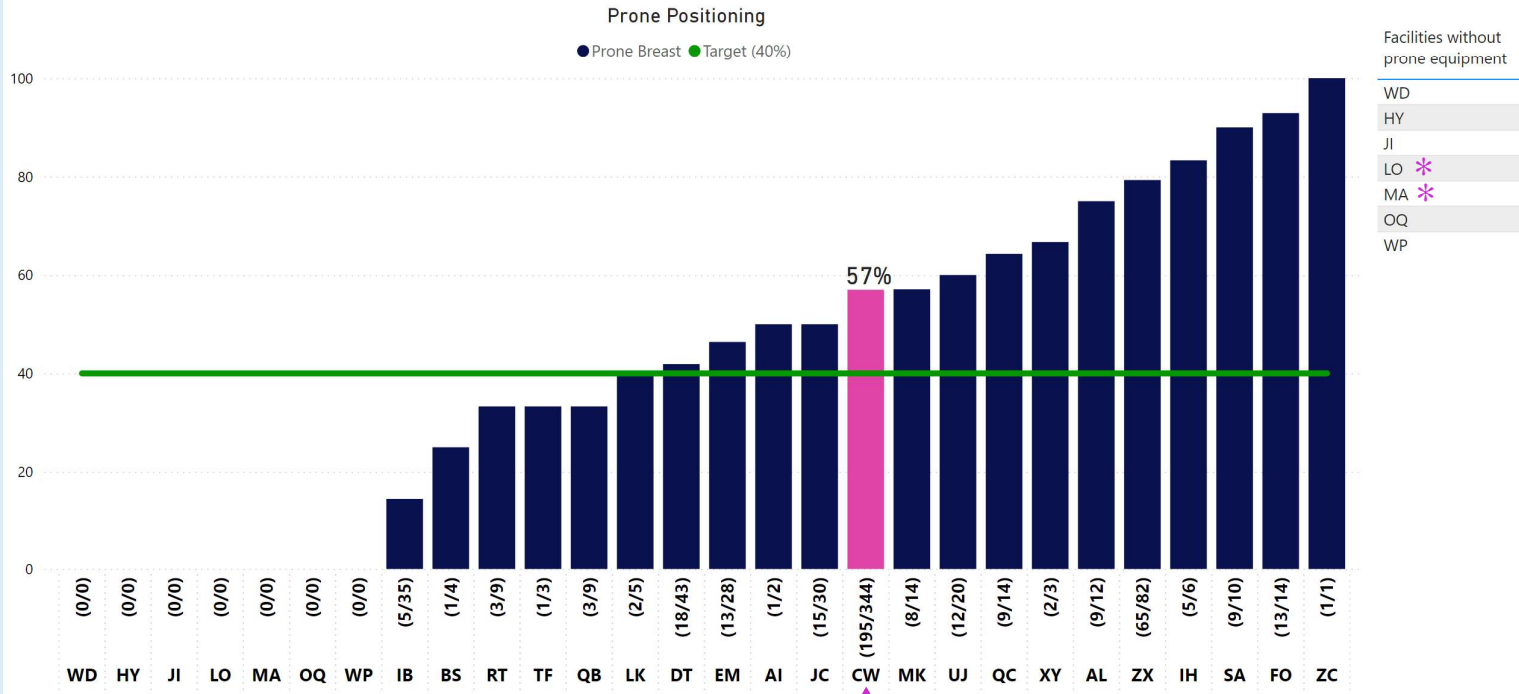
The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/08/2026

Measure Description:

Increase the collaborative-wide utilization of prone positioning for breast cancer radiation treatment

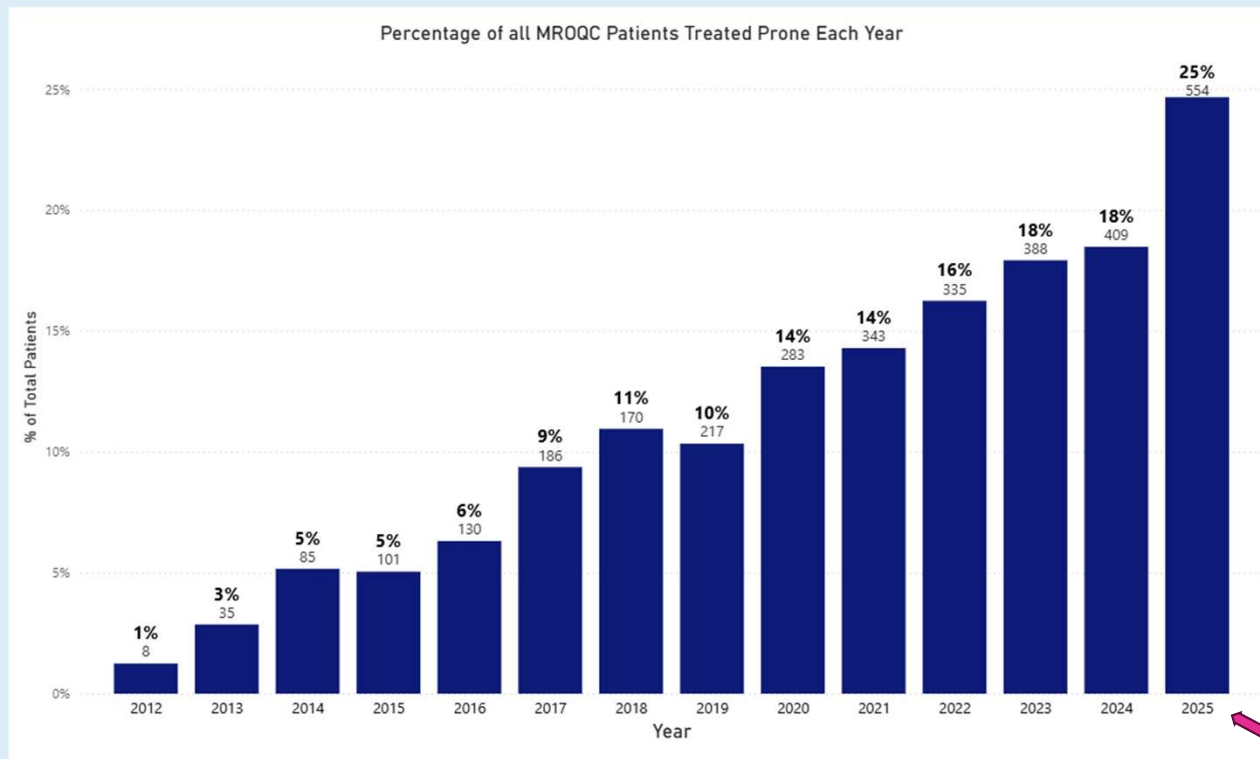
Full Points: $\geq 40\%$ of breast patients were treated in the prone position across MROQC
 Partial Points: 30-39% of breast patients were treated in the prone position across MROQC
 Zero Points: $< 30\%$ of breast patients were treated in the prone position across MROQC



* Have boards; currently no prone patients treated in 2026

CW=Collaborative-Wide

Driving Change in Practice: Prone Positioning Adoption Trends



Launch of collaborative-wide prone breast quality measure

Lymphedema Measurements for Patients Receiving Regional RT

Increase the baseline and post-radiation treatment (RT) completion rate of standard of care arm measurements for lymphedema assessment in node positive breast cancer patients treated to regional fields.

A. $\geq 50\%$ of breast patients treated to regional fields with a baseline measurement (B7 or B9) in 2025 must have a follow-up measurement (B10 or B14) completed and reported in cm within Q1-Q3 of 2026.

B. $\geq 50\%$ of breast patients treated to regional fields with a RT start date within Q1-Q3 of 2026 must have a baseline measurement (B7 or B9) reported in cm and complete nodal irradiation data (dose to irradiated nodal groups is reported and nodal contours are named according to TG263 guidelines).

10 Points

A and B were met

7 Points

Either A or B were met

0 Points

Neither A nor B were met

Lymphedema Assessment Quality Measure for Breast: Part A

The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

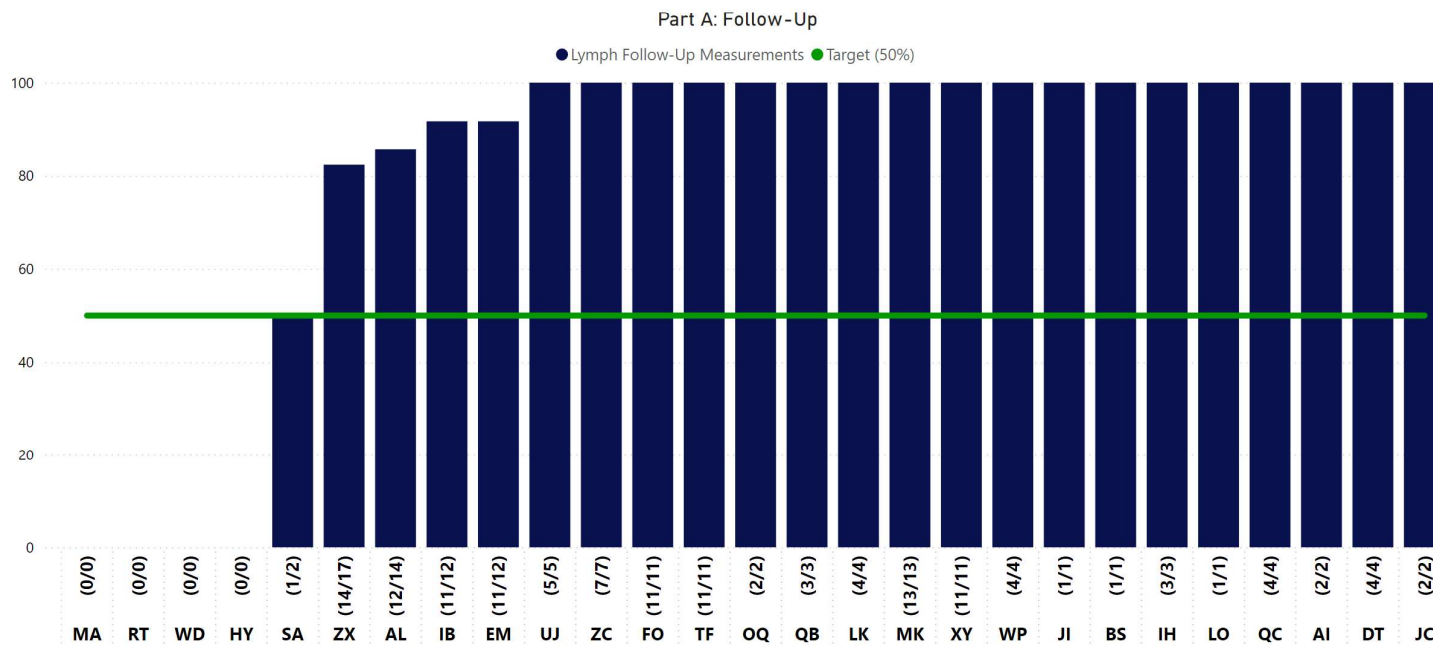
Data Refreshed as of 05/01/2026

Measure Description:

Increase the baseline and post-radiation treatment (RT) completion rate of standard of care arm measurements for lymphedema assessment in node positive breast cancer patients treated to regional fields.

- A. $\geq 50\%$ of breast patients treated to regional fields with a baseline measurement (B7 or B9) in 2025 must have a follow-up measurement (B10 or B14) completed within Q1-Q3 of 2026.
- B. $\geq 50\%$ of breast patients treated to regional fields with a RT start date within Q1-Q3 of 2026 must have a baseline measurement (B7 or B9) reported in cm and complete nodal irradiation data (dose to irradiated nodal groups is reported and nodal contours are named according to TG263 guidelines).

Full Points: A and B were met. Partial Points: Either A or B was met. Zero Points: Neither A or B was met.



Lymphedema Assessment Quality Measure for Breast: Part B

The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/01/2026

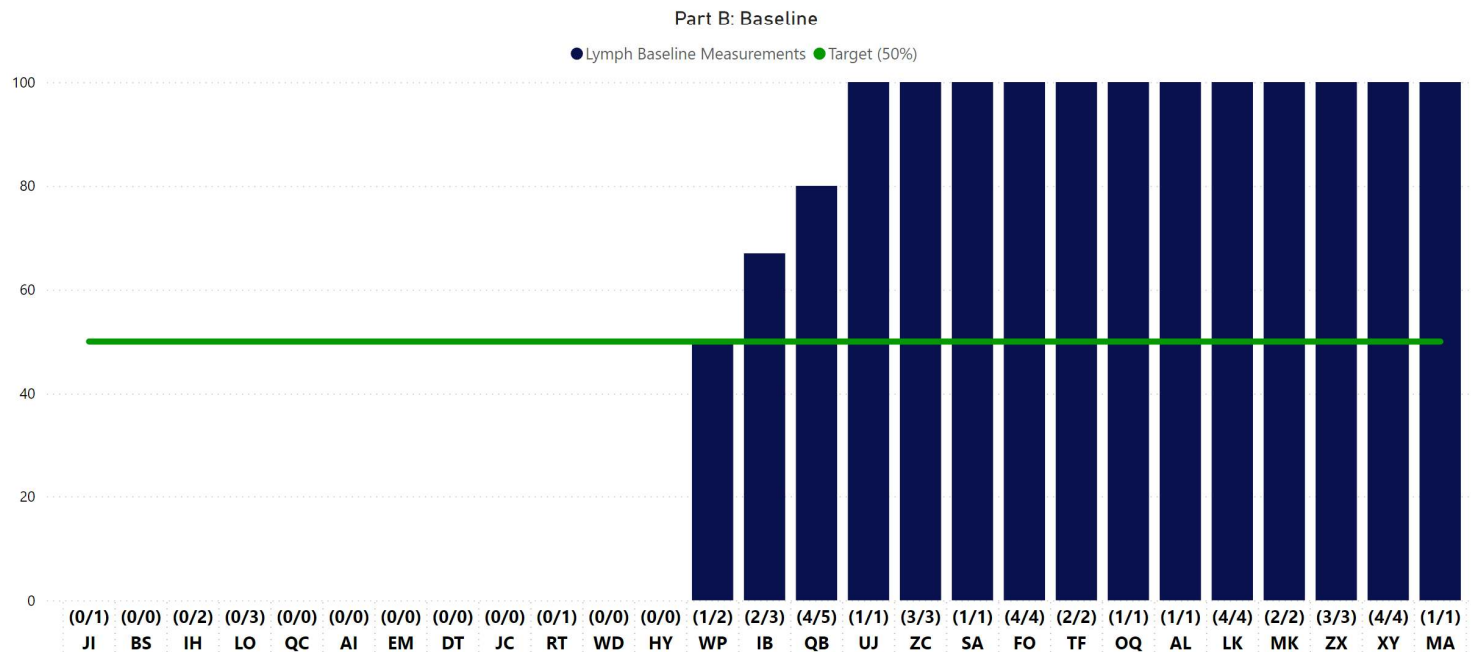
Measure Description:

Increase the baseline and post-radiation treatment (RT) completion rate of standard of care arm measurements for lymphedema assessment in node positive breast cancer patients treated to regional fields.

A. $\geq 50\%$ of breast patients treated to regional fields with a baseline measurement (B7 or B9) in 2025 must have a follow-up measurement (B10 or B14) completed within Q1-Q3 of 2026.

B. $\geq 50\%$ of breast patients treated to regional fields with a RT start date within Q1-Q3 of 2026 must have a baseline measurement (B7 or B9) reported in cm and complete nodal irradiation data (dose to irradiated nodal groups is reported and nodal contours are named according to TG263 guidelines).

Full Points: A and B were met. Partial Points: Either A or B was met. Zero Points: Neither A or B was met.



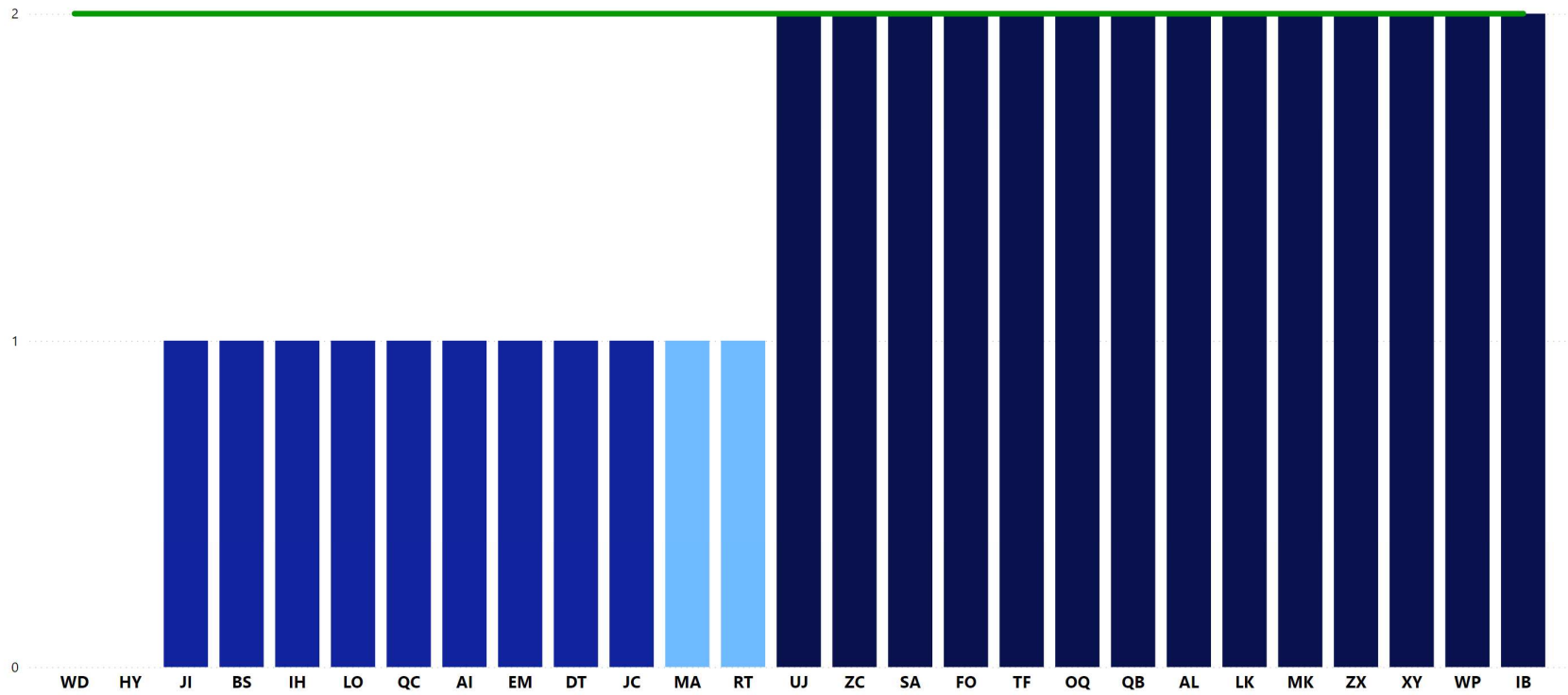
Lymphedema Assessment Quality Measure for Breast: Part A & B Combined

The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/08/2026

Lymphedema Assessment Measure

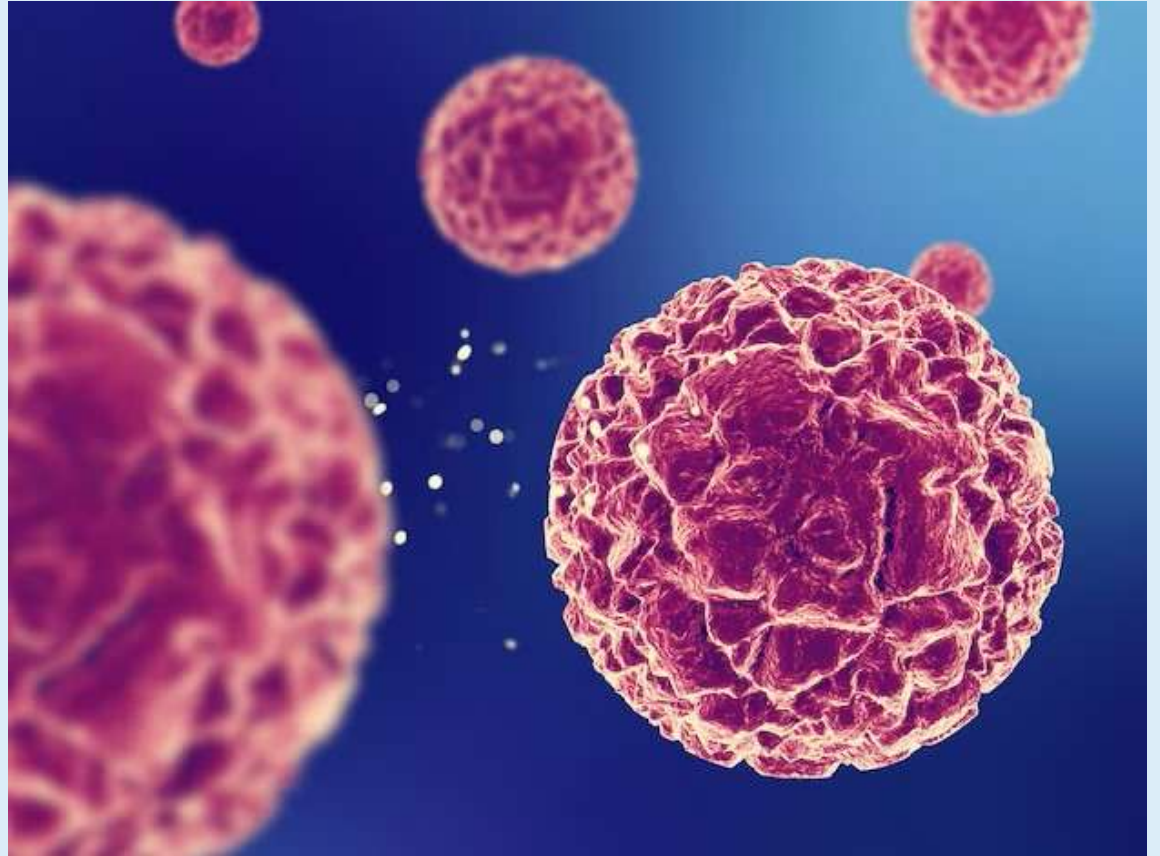
No patients ● Meeting Part A ● Meeting Part B ● Meeting Part A and B ● Target (A&B Met)



Any thoughts from the group?



PMRT



Post-Mastectomy Radiation Therapy (PMRT)

ARTICLE IN PRESS

Practical Radiation Oncology® (2025) 000, 1–23


www.practicalradonc.org

Clinical Practice Guideline

Postmastectomy Radiation Therapy: An ASTRO/ASCO/SSO Clinical Practice Guideline

Rachel B. Jimenez, MD,^{1,2,3,4} Yara Abdou, MD,⁵ Penny Anderson, MD,⁶ Parul Barry, MD,⁷ Lisa Bradfield, BA,⁸ Julie A. Bradley, MD,⁹ Lourdes D. Heras, MPH,⁹ Atif Khan, MD, MS,¹⁰ Cindy Matsen, MD,¹¹ Rachel Rabinovitch, MD,¹² Chantal Reyna, MD, MHA,¹³ Kilian E. Salerno, MD,¹⁴ Sarah E. Schellhorn, MD,¹⁵ Deborah Schofield, PhD,¹⁶ Kekoa Taparra, MD, PhD, MPH,¹⁷ Iman Washington, MD,¹⁸ Jean L. Wright, MD,¹⁹ Youssef H. Zeidan, MD, PhD,²⁰ Richard C. Zellars, MD,²¹ and Kathleen C. Horst, MD²²

¹Department of Radiation Oncology, Massachusetts General Hospital, Boston, Massachusetts; ²Department of Medical Oncology, University of North Carolina, Chapel Hill, North Carolina; ³Department of Radiation Oncology, Fox Chase Cancer Center, Philadelphia, Pennsylvania; ⁴Department of Radiation Oncology, UPAC Hillman Cancer Center, University of Pittsburgh, Pittsburgh, Pennsylvania; ⁵American Society for Radiation Oncology, Arlington, Virginia; ⁶Department of Radiation Oncology, University of Florida, Jacksonville, Florida; ⁷Patient Representative, Surviving Breast Cancer, Gilbert, Arizona; ⁸Department of Radiation Oncology, Memorial Sloan Kettering Cancer Center, New York, New York; ⁹Department of Surgery, Huntsman Cancer Institute at the University of Utah, Salt Lake City, Utah; ¹⁰Department of Radiation Oncology, University of Colorado Denver, Aurora, Colorado; ¹¹Department of Surgery, Loyola University Medical Center, Chicago, Illinois; ¹²Radiation Oncology Branch, National Cancer Institute, Bethesda, Maryland; ¹³Department of Medicine, Yale School of Medicine, New Haven, Connecticut; ¹⁴Department of Radiation Physics, University of Texas MD Anderson Cancer Center, Houston, Texas; ¹⁵Department of Radiation Oncology, David Geffen School of Medicine, University of California Los Angeles, Los Angeles, California; ¹⁶Department of Radiation Oncology, Moffitt Cancer Center, Tampa, Florida; ¹⁷Department of Radiation Oncology, University of North Carolina, Chapel Hill, North Carolina; ¹⁸Department of Radiation Oncology, Florida International University and Lynn Cancer Institute, Boca Raton, Florida; ¹⁹Department of Radiation Oncology, Indiana University School of Medicine, Indianapolis, Indiana; and ²⁰Department of Radiation Oncology, Stanford University, Stanford, CA

Sources of support: This work was funded by the American Society for Radiation Oncology.

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²²Corresponding author: Rachel Jimenez, MD. Email: rjimenez@mgm.org

<https://doi.org/10.1016/j.prro.2025.05.001>
1879-8585/2025 American Society for Radiation Oncology, American Society of Clinical Oncology and Society of Surgical Oncology. Published by Elsevier Inc on behalf of American Society for Radiation Oncology, by Wolters Kluwer Health, on behalf of American Society of Clinical Oncology and by Springer Nature on behalf of Society of Surgical Oncology. All rights reserved, including those for text and data mining, AI training, and similar technologies.

A Post-Mastectomy Radiation Therapy (PMRT) Committee was formed in early 2026.

Thank you to Mike Dominello, Mazen Mislmani, Mark Zaki, Shelley Tibbs, Terri Bott-Kothari, Lori, Frank, and Robin for volunteering.



PMRT Volume & Reconstruction Snapshot

20 MROQC Facilities Responded

Total PMRT Patients: 534

Average per Facility: ~30

Volume Distribution:

Low (<20): 9 facilities

Mid (20–50): 9 facilities

High (>50): 2 facilities

Reconstruction:

With: 276 (52%)

Without: 258 (48%)

Reconstruction Type:

Implant-based: ~90%

Autologous: ~10%

Draft List of Things to Collect

Reconstruction

Toxicities

Systemic Agents

Practice Patterns

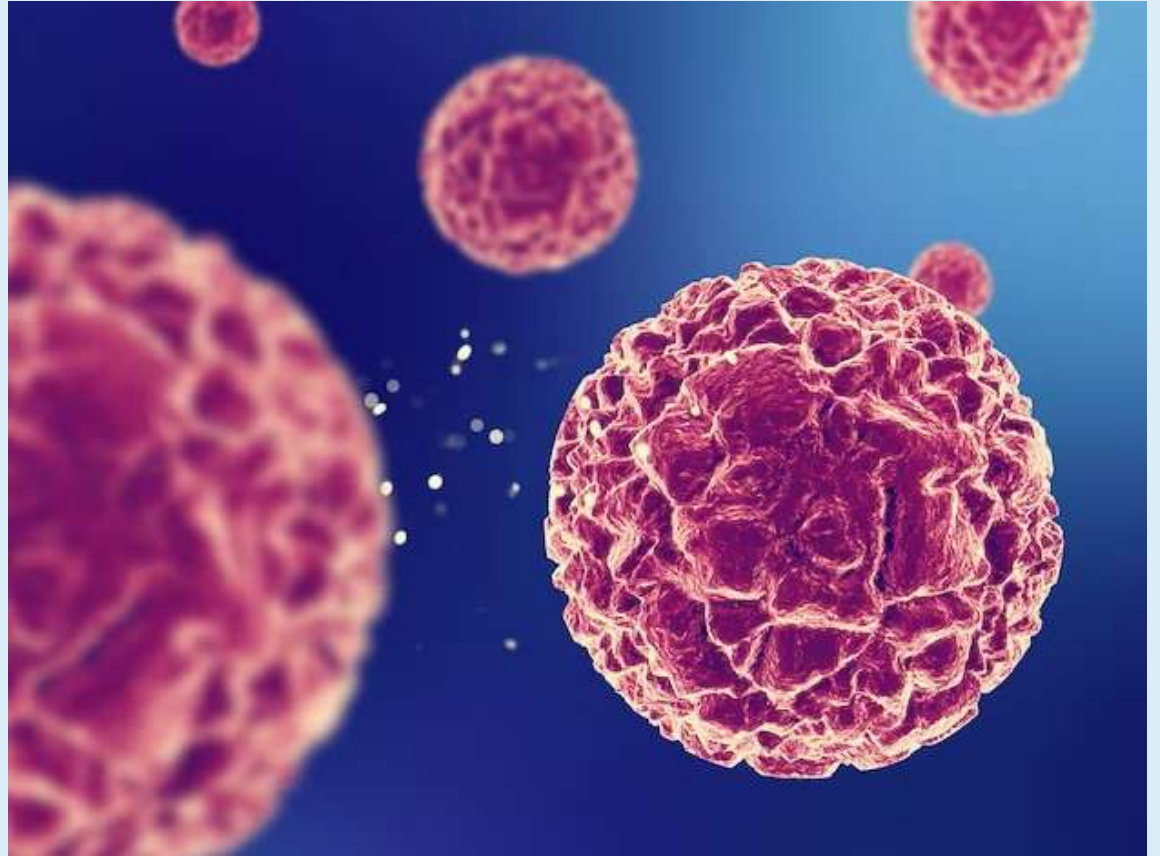
Use of Bolus

Cosmesis

Timing of RT & Implant Exchange

Are there any additional data elements or areas of interest that you feel would be valuable for us to collect?

Long Term Follow Up



MROQC Breast Long Term Follow Up (10-Yr) Draft Form



Breast Long Term Follow-up Form

Patient ID: _____

Review Date: _____

To be completed by the CDA at 10 years after completion of radiation treatment. If no information is available to complete this form, report this on the SE2 form and close the patient record.

<p>1. Survival Status at the time of follow-up (select one): If the patient is deceased, report the date of death, complete the SE2 form, and proceed to question 5.</p> <p><input type="checkbox"/>₁ Alive with no evidence of disease <input type="checkbox"/>₂ Alive with disease <input type="checkbox"/>₃ Deceased with no evidence of disease <input type="checkbox"/>₄ Deceased with disease</p> <p>2. Disease Recurrence: Complete this section only if the patient is alive or has and has had a recurrence at the time of follow-up.</p> <p>First recurrence: Site of first recurrence (check all that apply): <input type="checkbox"/>₁ Local (breast) <input type="checkbox"/>₂ Regional nodes (axilla, supraclavicular, IMN) <input type="checkbox"/>₃ Distant (specify site): _____ Date of first recurrence₄ (mm/yyyy): _____ Date unknown <input type="checkbox"/> ₅</p> <p>Management of first recurrence (check all that apply): <input type="checkbox"/>₆ Local excision <input type="checkbox"/>₇ Mastectomy <input type="checkbox"/>₈ Radiation therapy <input type="checkbox"/>₉ Endocrine therapy <input type="checkbox"/>₁₀ Chemotherapy <input type="checkbox"/>₁₁ Other (specify): _____</p> <p>Any subsequent recurrence₁₂: Site and date (mm/yyyy): _____ Date unknown <input type="checkbox"/> ₁₃</p> <p>3. Has the patient had any new cancer diagnoses since completing treatment? <input type="checkbox"/>₁ Yes – if yes, report type, site, and date of diagnosis <input type="checkbox"/>₂ No – if no, proceed to Cardiac History</p> <p>If Yes: <input type="checkbox"/>₃ Breast cancer Date of diagnosis₄ (mm/yyyy): _____ Date unknown <input type="checkbox"/> ₅ <input type="checkbox"/>₆ Other cancer Type: _____ Site & laterality₇: _____ Date of diagnosis₈ (mm/yyyy): _____ Date unknown <input type="checkbox"/> ₉</p>	<p>4. Cardiac History</p> <p>a. Cardiovascular risk factors (check all that apply): <input type="checkbox"/>₁ Diabetes <input type="checkbox"/>₂ History of Adriamycin Use <input type="checkbox"/>₃ History of Herceptin Use <input type="checkbox"/>₄ Hyperlipidemia <input type="checkbox"/>₅ Hypertension <input type="checkbox"/>₆ Smoking History <input type="checkbox"/>₇ Stroke</p> <p>b. Since the end of treatment, has the patient been diagnosed with a cardiac risk factor or event? <input type="checkbox"/>₁ Yes <input type="checkbox"/>₂ No - If No, all required questions have been completed.</p> <p>c. If Yes: Select the cardiac event(s) and report date of diagnosis (mm/yyyy):</p> <p><input type="checkbox"/>₃ Angina Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₄ Arrhythmia Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₅ Cerebrovascular Event (Stroke) Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₆ Congestive Heart Failure Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₇ Myocardial Infarction Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₈ Pericardial Effusion Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₉ Valvular Heart Disease Date: _____ <input type="checkbox"/> Unknown <input type="checkbox"/>₁₀ Other (Specify): _____ Date: _____ <input type="checkbox"/> Unknown</p>
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Thank You to Our Long Term Follow Up Pilot Facilities

Interested in being a pilot
facility? Please reach out
to support@mroqc.org

Michigan Medicine

Henry Ford Providence

Munson

West Michigan Cancer Center



Join Us!

**Our Next
Working Group
Meeting will be:**

**Thursday, June 25th
12:00-1:00 p.m.**

MROQC Prostate Quality Improvement Working Group Update

May 15, 2026



Bob Dess, Dave Heimburger, Karolyn Hopfensperger

Today's Agenda

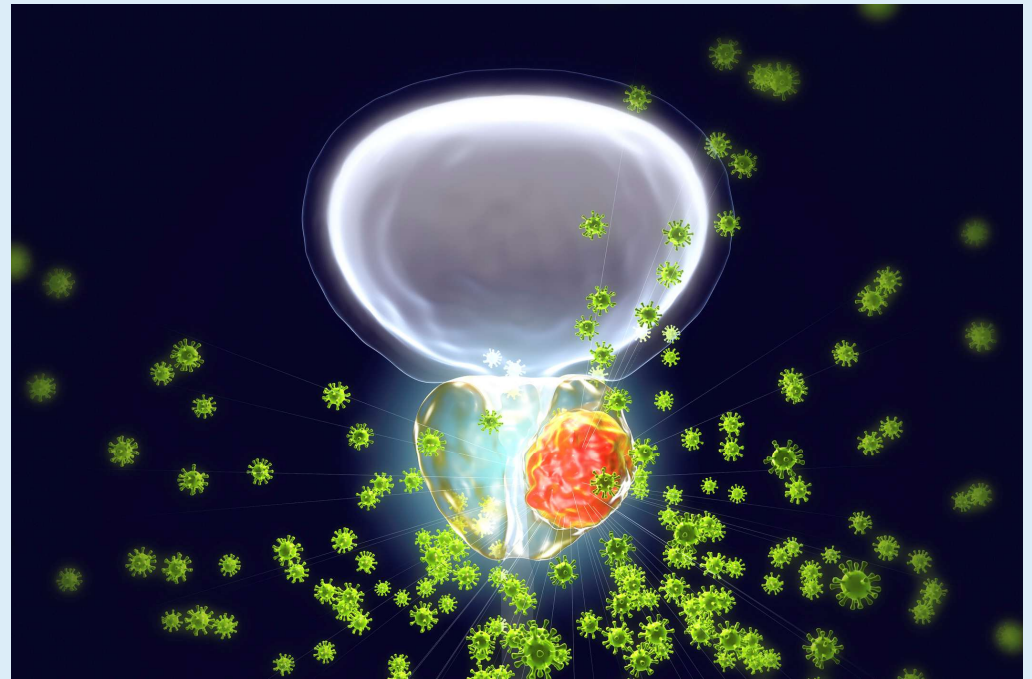


WORKING GROUP STATUS
UPDATE



HOT TOPICS:
NEW QUALITY MEASURE(S)

Prostate Working Group Status Update



MRQC
— PROSTATE WORKING GROUP —

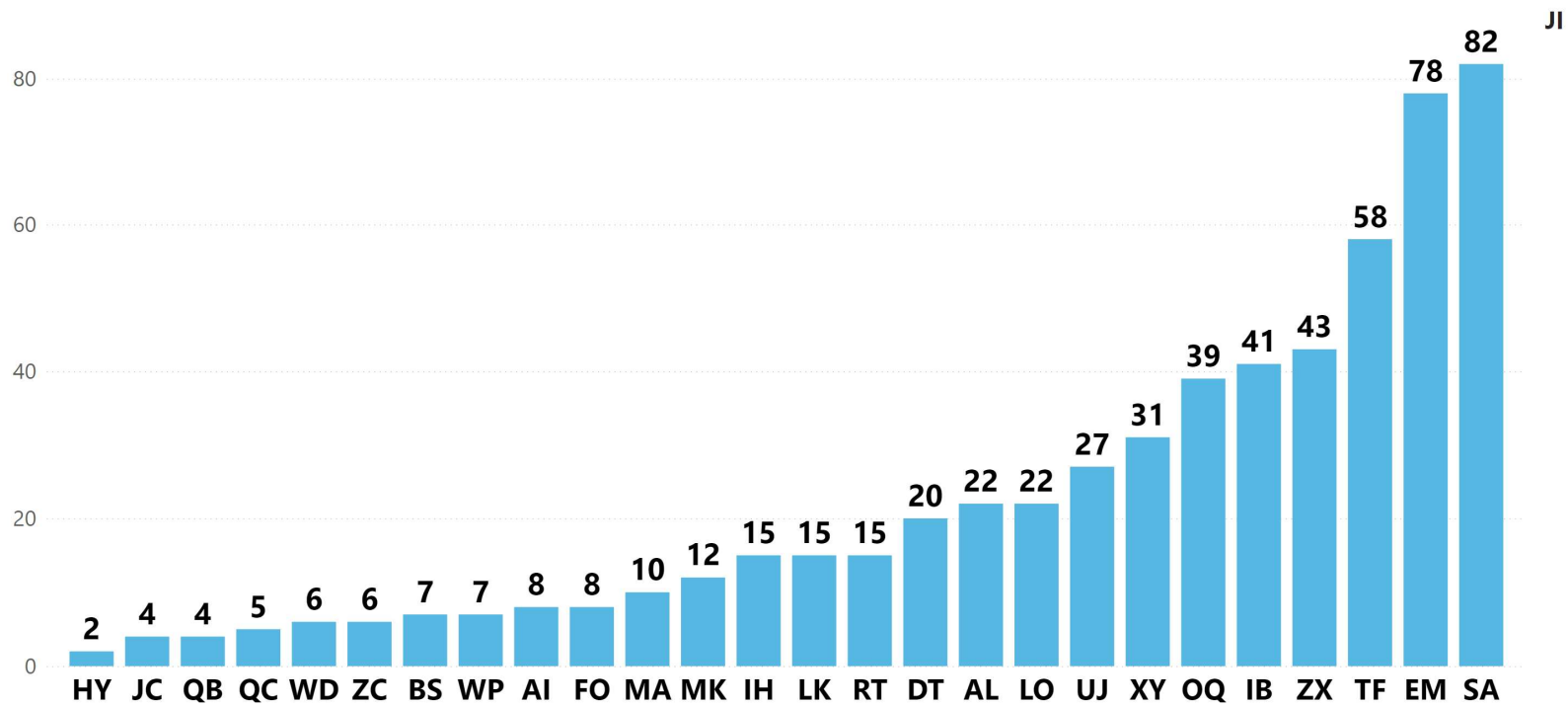
ENROLLMENT FOR PROSTATE PROJECT

Data as of 5/1/2026



ENROLLMENT BY FACILITY

Facilities with no data

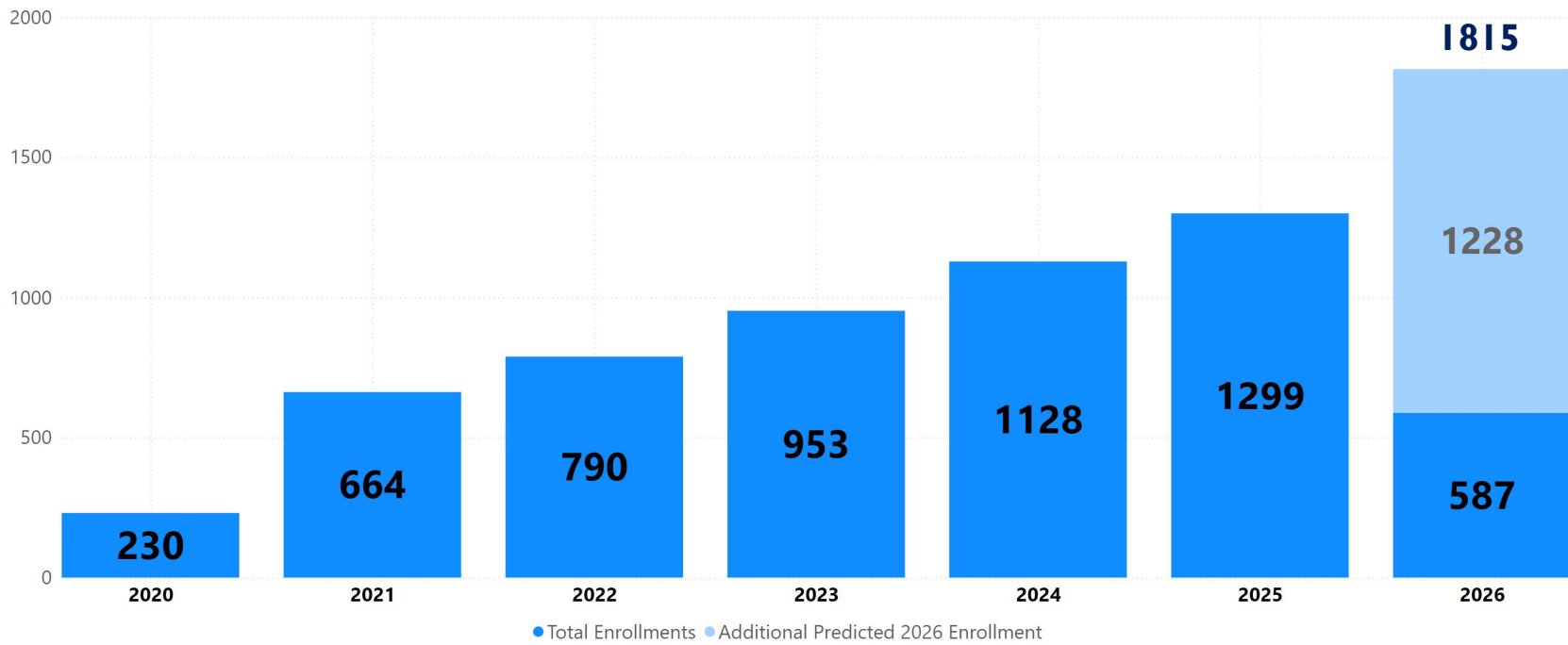


ENROLLMENT FOR PROSTATE PROJECT

Data as of 5/1/2026



ENROLLMENT BY YEAR



PROSTATE MATCHING DASHBOARD

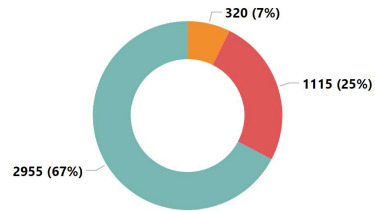
Data current as of 05/11/2026



Matching Rate - Consortium Wide

Includes only Matching Facilities

Match Status ● Pending ● No ● Yes



Pending status includes patients <26 weeks from enrollment without a match from MUSIC

Enrollment / Matching Breakdown Current Last Report
4/20/2026

Enrolled Patients (All Facilities)	9901	9732
Enrolled Patients (Matching Facilities)	7340	7232
Eligible Patients (All Facilities)	5811	5681
Eligible Patients (Matching Facilities)	4390	4299
Matched Patients (From Matching Facilities)	2955	2918

*Facility 5172: exclude cases enrolled before 4/25/22

*Facility 5173: exclude cases enrolled after 8/23/22

*Facilities 154, 155, 158, 23932, 23933, 31028: exclude cases enrolled after 1/30/23

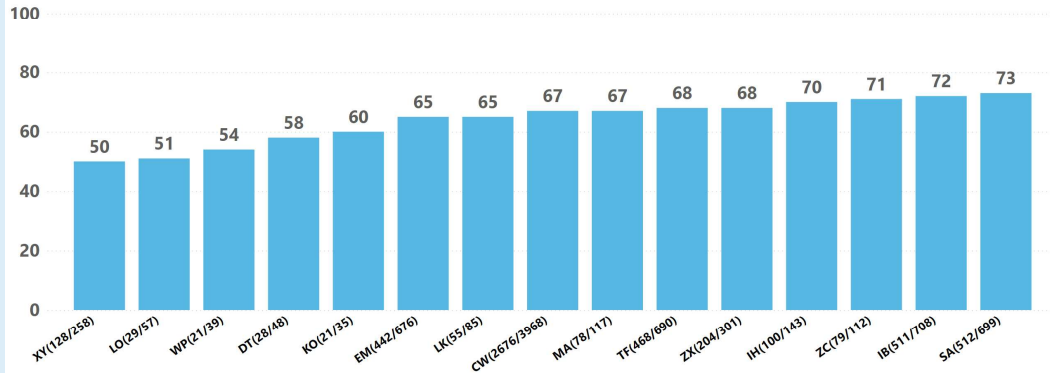
*Facility 976: exclude cases enrolled between 1/30/2023 and 8/14/2023

Matching Rate by Site

For Current Matching Sites

Intact and Post op patients

Matching Rate by Facility



*CW : Consortium Wide Totals

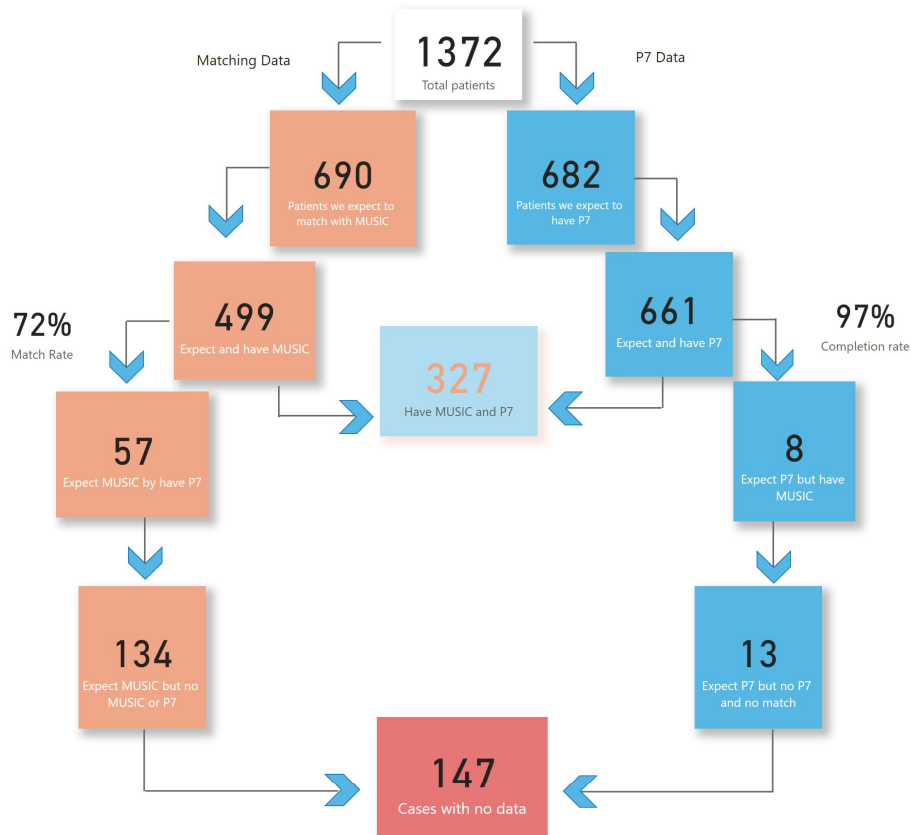


MATCHING AND P7 RATES

Treatment start dates from 1/1/2025-Present



Data current as of 5/11/2026

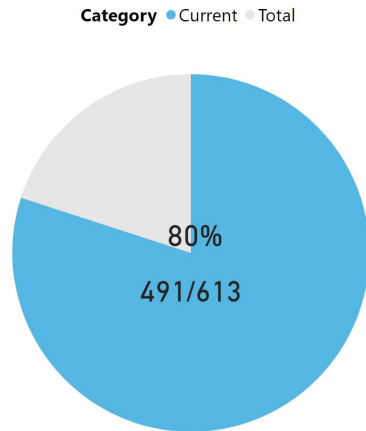


BASELINE FORM DATA DASHBOARD

Data current as of 05/11/2026

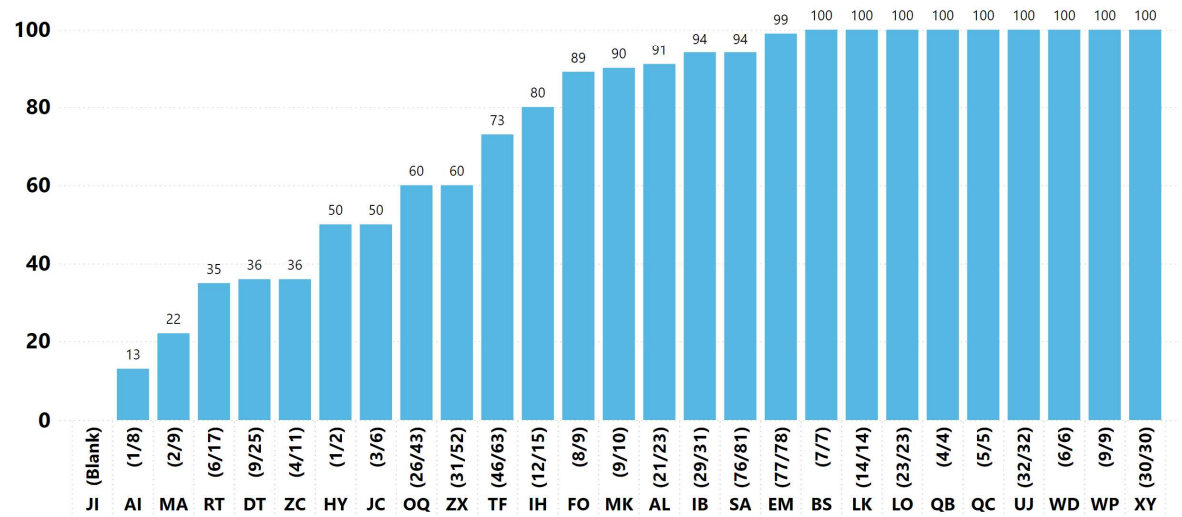


Baseline Form Completion Rate Consortium Wide in 2026



Rate of Baseline Form (P1/P2) Completion by Facility for 2026

Please drill through to see site specific details of Patients with or without baseline



2026 Prostate Quality Initiatives



RECOMMENDED ADT



MRI UTILIZATION

2026 Recommended ADT



Improve percentage of patients with intact, localized, high-risk prostate cancer patients receiving definitive radiotherapy that are recommended to receive long-term androgen deprivation therapy (ADT).

10 Points

≥65% of prostate cancer patients recommended to receive long-term ADT

7 Points

55-64% of prostate cancer patients recommended to receive long-term ADT

0 Points

<55% of prostate cancer patients recommended to receive long-term ADT

This measure is part of 2026 P4P|2027 Gold Card|2027 CQIVBR

ADT Recommendation Quality Measure for Prostate

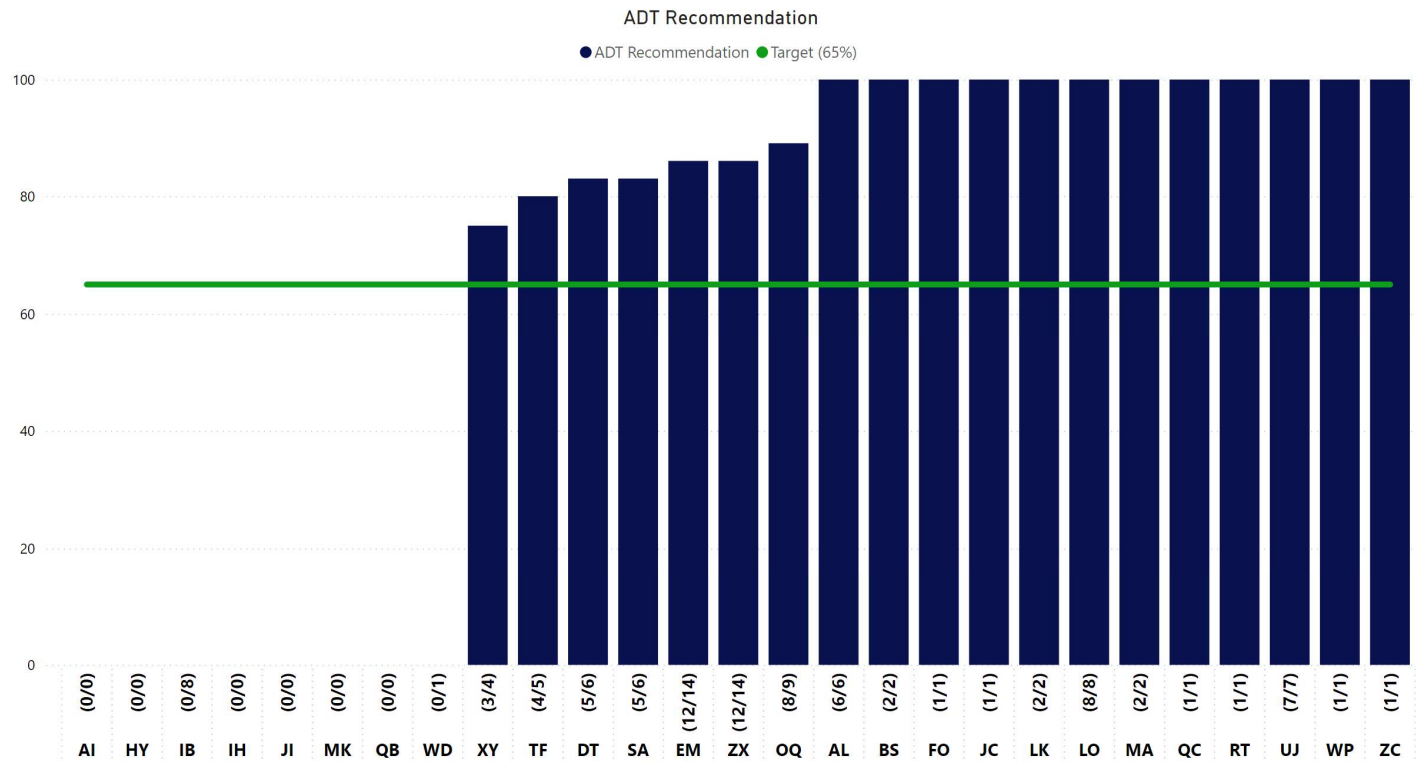
The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/01/2026

Measure Description:

Improve percentage of patients with intact, localized, high-risk prostate cancer receiving definitive radiotherapy that are recommended to receive long-term androgen deprivation therapy (ADT)

Full points: >=65% of prostate cancer patients recommended to receive long-term ADT
Partial points: 55-64% of prostate cancer patients recommended to receive long-term ADT
Zero points: <55% of prostate cancer patients recommended to receive long-term ADT



2026 MRI Utilization

Increasing MRI Utilization for Intact Prostate Cancer Patients Receiving Definitive Radiotherapy

10 Points	≥70% of prostate cancer patients received an MRI
7 Points	60-69% of prostate cancer patients received an MRI
0 Points	<60% of prostate cancer patients received an MRI

This measure is part of 2026 P4P|2027 Gold Card|2027 CQI VBR

MRI Utilization Quality Measure for Prostate

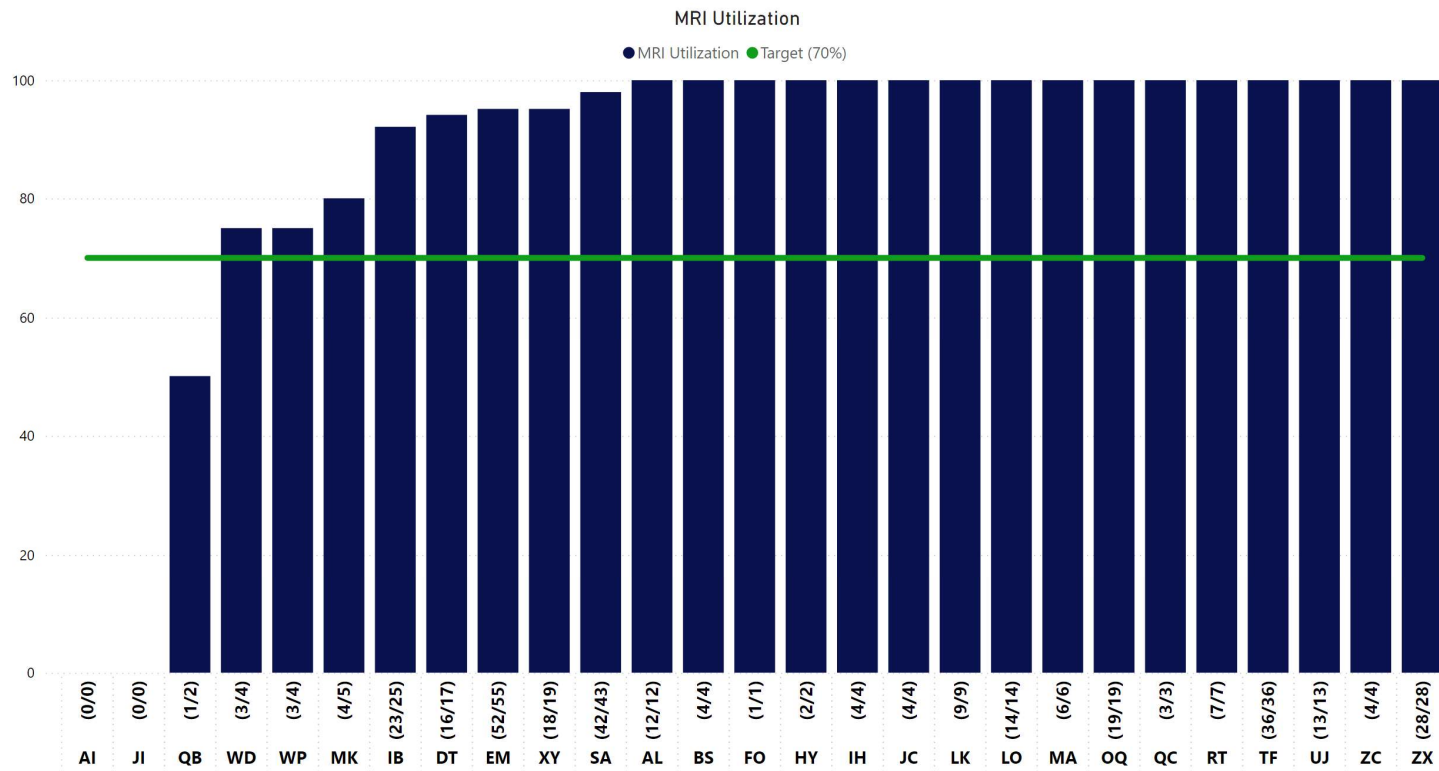
The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/01/2026

Measure Description:

Increase MRI utilization for intact prostate cancer patients receiving definitive radiotherapy

Full points: >=70% of prostate cancer patients received an MRI
Partial points: 60-69% of prostate cancer patients received an MRI
Zero points: <60% of prostate cancer patients received an MRI



Hot Topics: New Quality Measure(s)



Thank you!

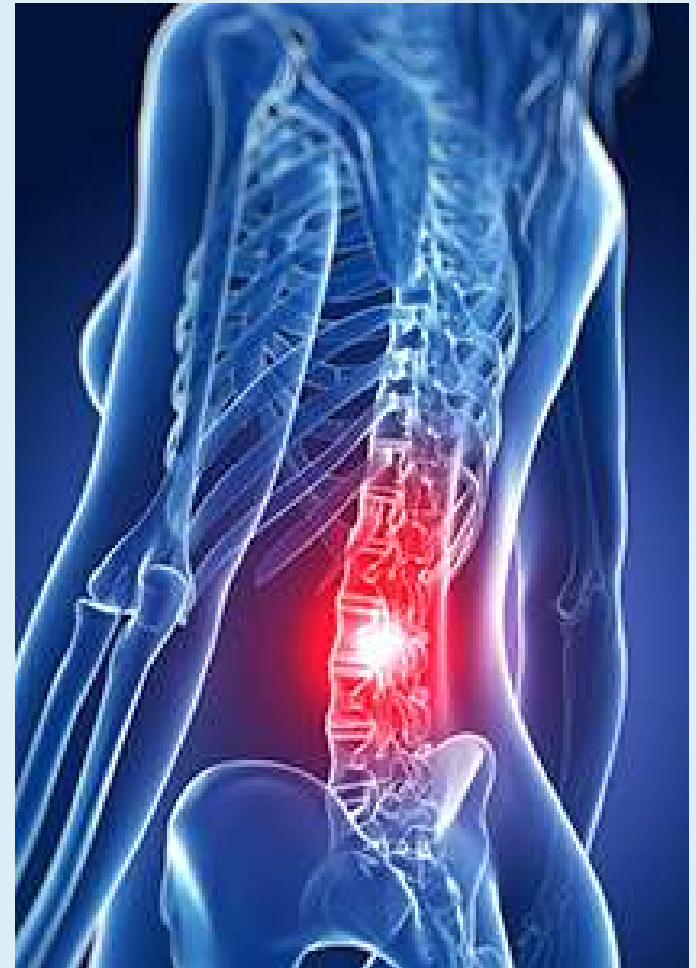
Our Next Working Group Meeting will be Tuesday, June 16th from 12-1 p.m. featuring guest, Tyler Seibert, MD, PhD



MROQC Mets Working Group Meeting

May 15, 2026

Donna Edwards, Eyad Abu-Isa, Lana Critchfield



Today's Agenda



WORKING GROUP PERFORMANCE



2027 QUALITY MEASURE(S)



BRAIN METS FUTURE DIRECTIONS
& DATA COLLECTION

Working Group Performance

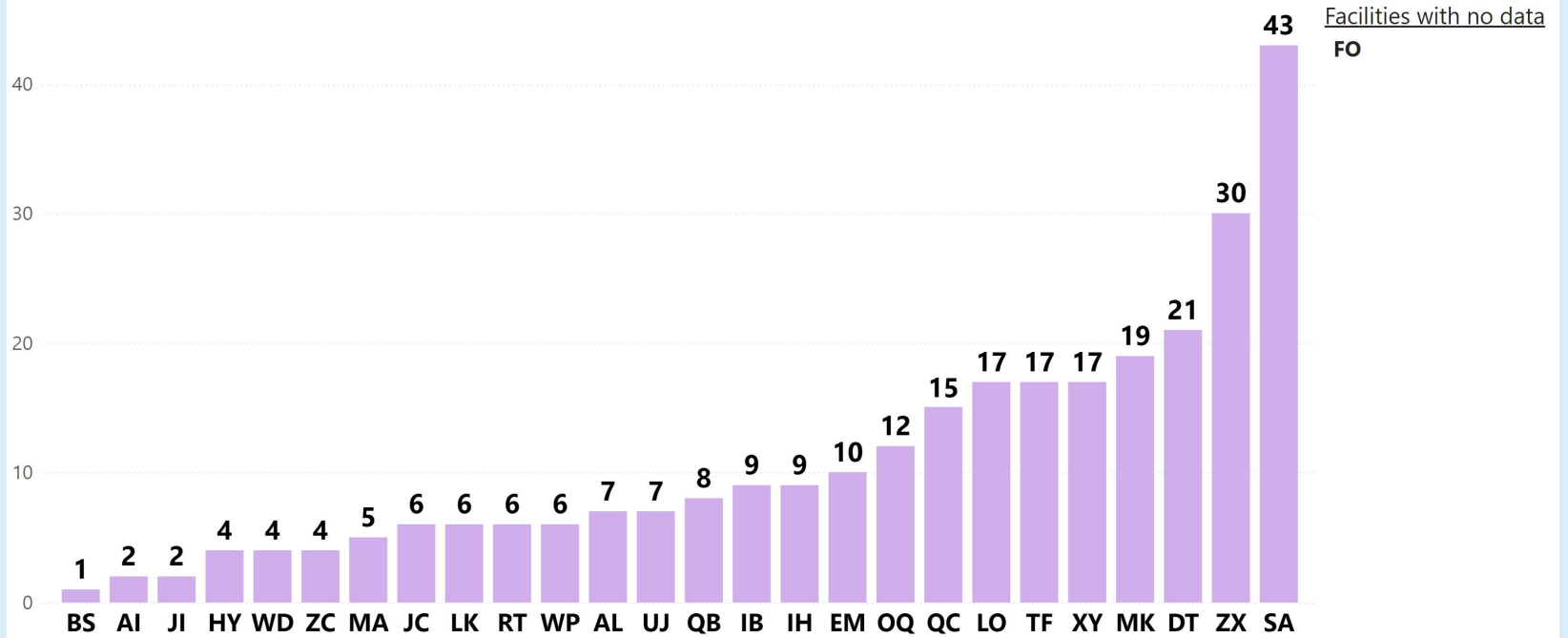


ENROLLMENT FOR METS PROJECT

Date refreshed as of 5/1/2026



ENROLLMENT BY FACILITY

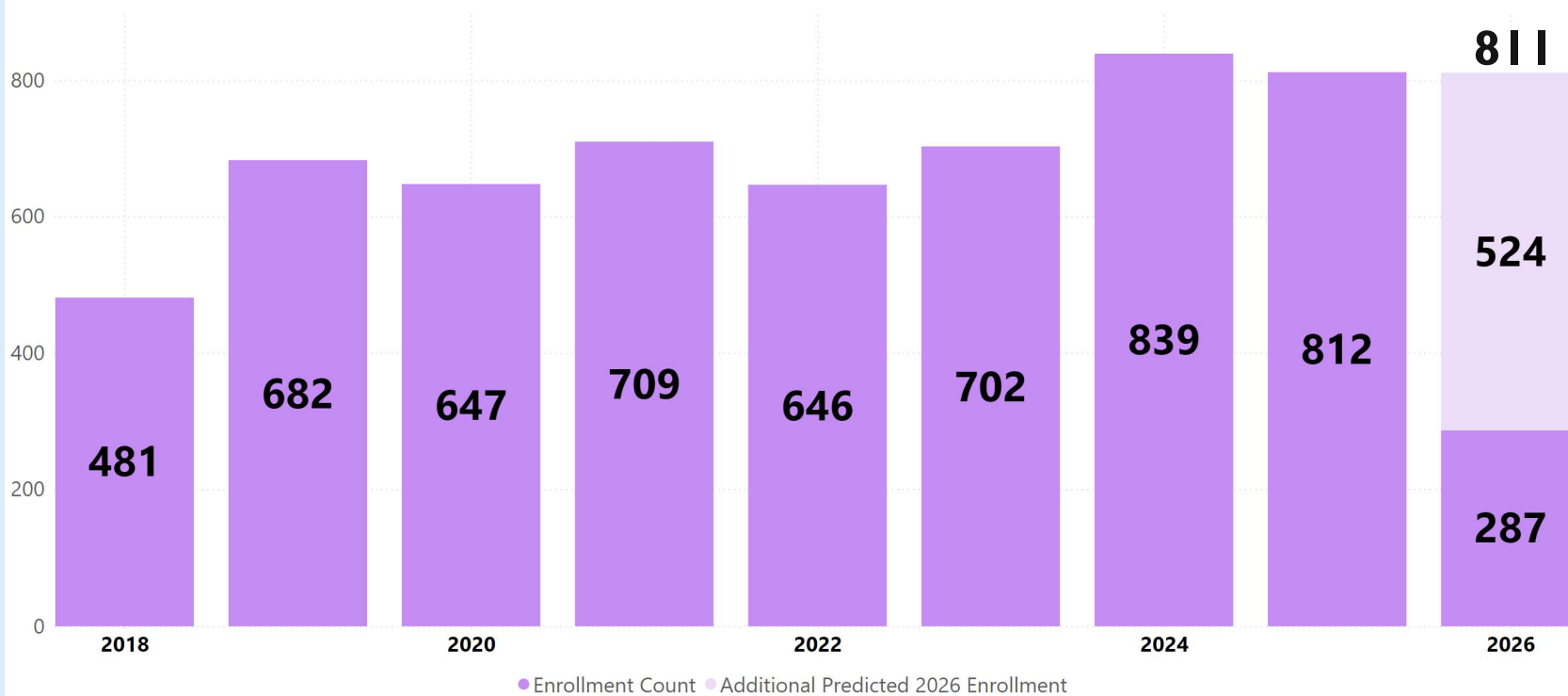


ENROLLMENT FOR METS PROJECT

Date refreshed as of 5/1/2026



ENROLLMENT BY YEAR



2026 Shorter Tx. Bone Mets Quality Measure

Increase the utilization rate of bone mets treatments consisting of 5 fractions or fewer.

10 Points

≥75% rate achieved

7 Points

60-74% rate achieved

0 Points

<60% rate achieved

This measure is scored per treatment course

This measure is part of 2026 P4P|2027 Gold Card|2027 CQI VBR



5 or Less Fractions Quality Measure for Bone Mets

The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/01/2026

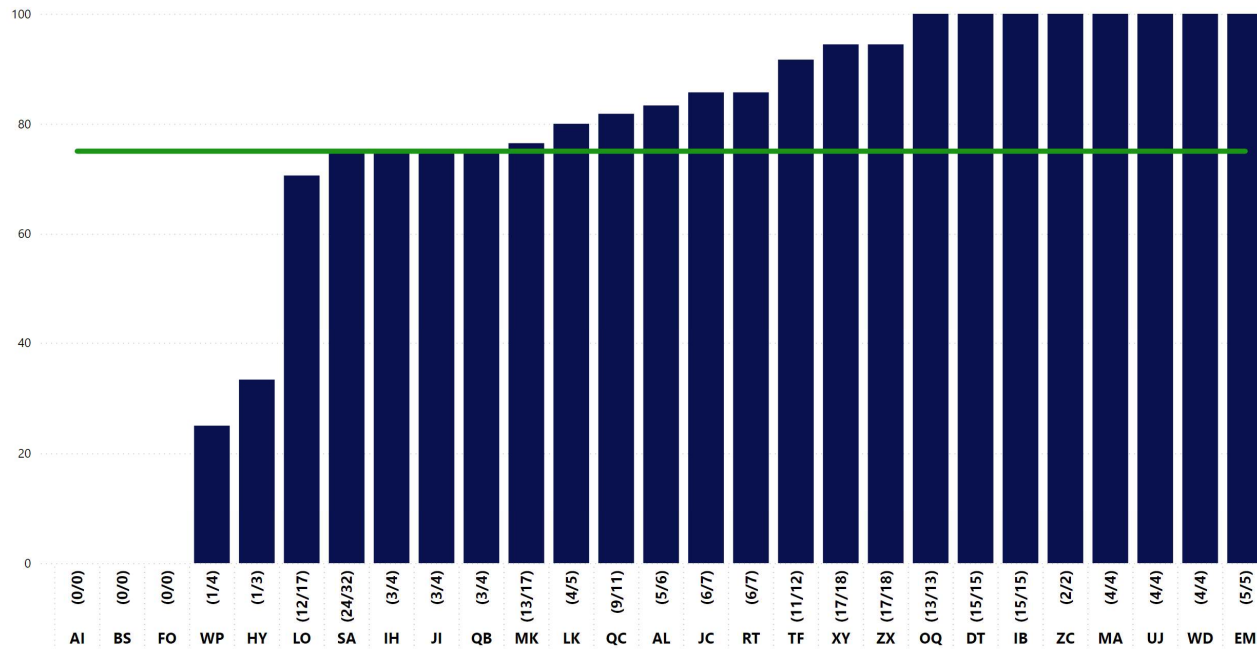
Measure Description:

Increasing the use of shorter course radiotherapy for bone metastasis as shown by use of <5 fraction treatment for at least 75% of patients

Full points: ≥75% rate achieved
 Partial points: 60-75% rate achieved
 Zero points: <60% rate achieved

5 Fractions Measure

● Less 5 Fractions % ● Target (75%)



MROQC Publication Highlight

Advances in Radiation Oncology (2026)

Progress in Shortening Treatment Courses for Bone Metastases in a Statewide Quality Consortium

Luke Higgins, Huiying Yin, Kent Griffith, Jumoke Johnson-Olokesusi, Amit Bhatt, Kelly Paradis, Lana Critchfield, Eyad Abu-Isa, Kaitlyn Baldwin, Vrinda Narayana, Howayda Messiha, Jennifer Davis, Mohamad Fakhreddine, James Hayman



Key Findings

- Analysis included **4,477 patients** and **6,733 RT treatment plans** across the statewide consortium
- Use of **single-fraction RT** for uncomplicated bone metastases increased from **17.8% → 38.8%** following implementation of quality measures
- Use of **≤5 fraction RT courses** for bone metastases increased from **44.2% → 63.9%**
- Demonstrates successful statewide adoption of shorter, evidence-based treatment approaches through collaborative quality improvement

Why It Matters

- ✓ Improved patient convenience
- ✓ Reduced treatment burden and travel
- ✓ Supports high-value, patient-centered care
- ✓ Demonstrates real-world impact of MROQC quality initiatives



Published on behalf of the Michigan Radiation Oncology Quality Consortium (MROQC) as part of the BCBSM Value Partnerships Program

2026 Bone Mets Reirradiation Measure

Increase the rate of physics consultation for bone metastases reirradiation.*

**For cases where there is concern for toxicity due to cumulative dose (Type 1 or Type 2 reirradiation), the physics consult must occur prior to physician approval. For Type 1 reirradiation cases with no concern for toxicity, the consult must occur prior to the start of treatment.*

10 Points

≥50% documentation rate of a physics consult achieved by facility

0 Points

<50% documentation rate of a physics consult achieved by facility



This measure will be part of 2026 P4P|2027 Gold Card|2027 CQIVBR

Physics Consult for Bone Mets Re-Irradiation Quality Measure

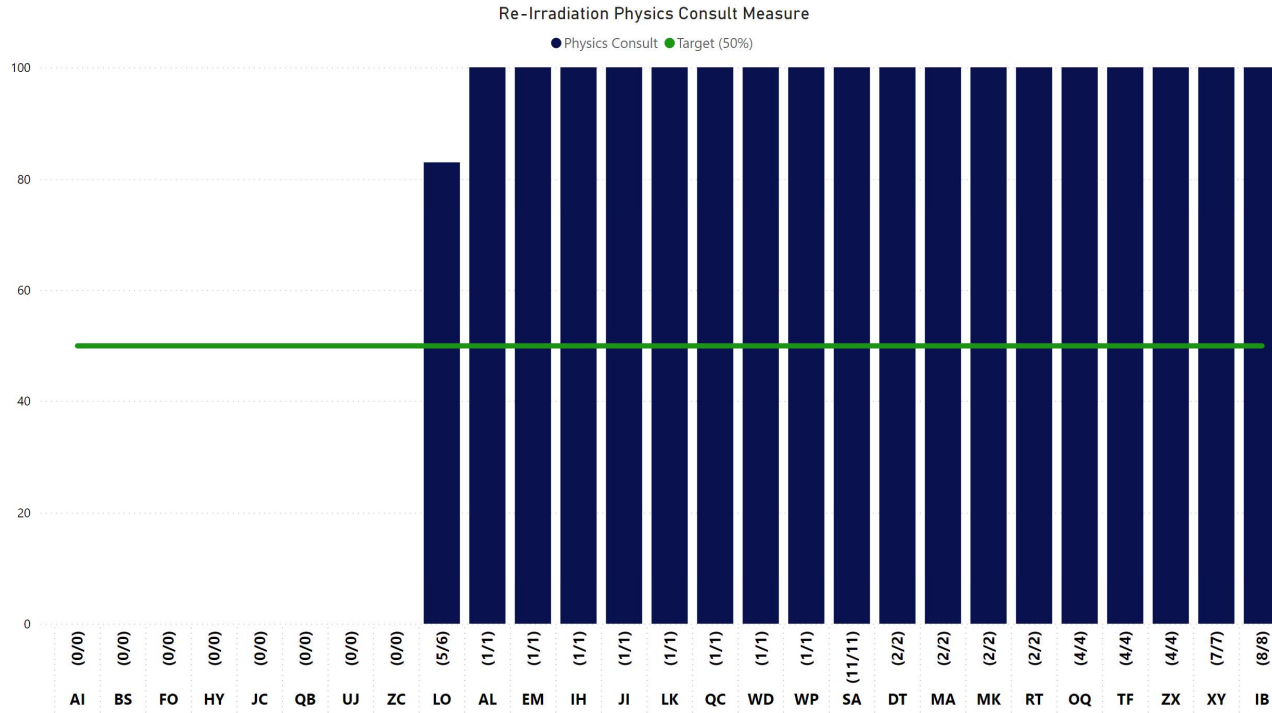
The 2026 Performance Period includes cases who started RT 01/01/2026-09/30/2026

Data Refreshed as of 05/01/2026

Measure Description:

For 50% or more of bone mets reirradiation cases, it is documented that physics was consulted before final physician approval of a plan for Type 1 reirradiation (Overlap of irradiation volumes with or without concern for toxicity from cumulative doses) OR Type 2 reirradiation (No overlap of irradiated volumes but concern for toxicity from cumulative doses)

Full Points: >=50% of bone mets reirradiation cases received a physics consult
Zero Points: <50% of bone mets reirradiation cases received a physics consult



2027 Quality Measure(s)



MROQC Mets Working Group: 2-Year Roadmap

2026: Focus & Foundation

Brain Metastases

- Draft data collection forms
- Expert-led discussions on:
 - Large/post-operative cases
 - SRS for 5–10 metastases
 - Dose metrics and toxicity
 - Case-based education and shared learning

Bone Metastases

- Define scope and key gaps in:
 - Reirradiation
 - SIM-free radiation
 - Inventory current practice patterns and barriers

2027 Alignment & Application

Brain Metastases

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

Bone Metastases

- Advance reirradiation frameworks:
 - Patient selection
 - Cumulative dose considerations
- Explore best practices for SIM-free workflows

Start with shared understanding-build toward alignment.

Future Updates to Reirradiation Documentation

Reirradiation Collaborative Group (ReCOG) consensus on standards for dose evaluation and reporting in patients with multiple courses of radiation therapy: an AAPM/ACRO/ASTRO/CARO/COMP/CADRA/CPQR/ESTRO/NRG-endorsed consensus statement



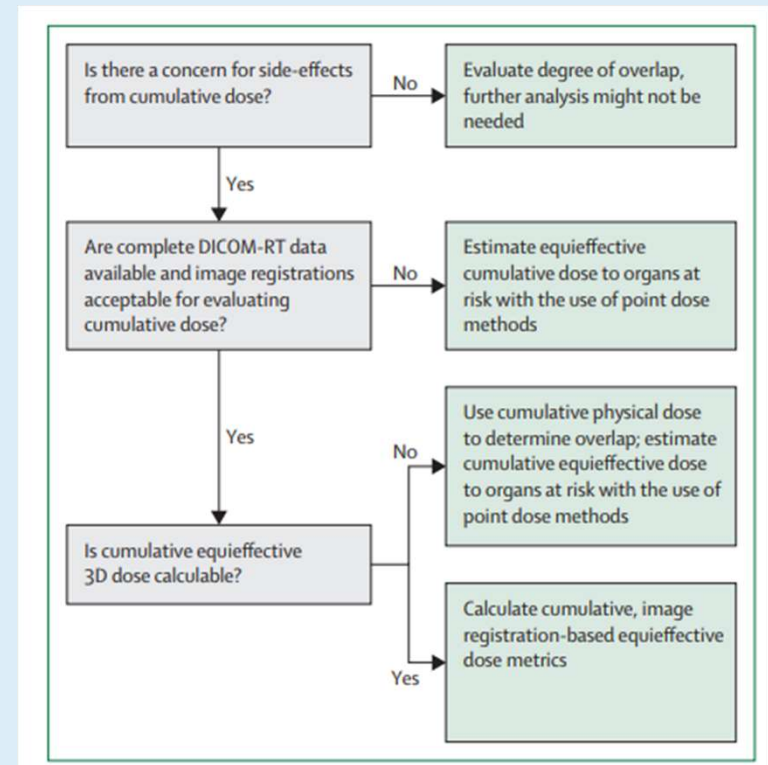
Kelly C Paradis, Ane L Appelt, Soren M Bentzen, Nick Chng, Elizabeth L Covington, Laura A Dawson, Dorota Gabrys, Dwight E Heron, Lone Hoffmann, Andrew Jackson, Lawrence B Marks, Charles Mayo, Kilian E Salerno, Charles B Simone 2nd, Ying Xiao, Ellen Yorke, Philip Poortmans*, Jeffrey C Buchsbaum*



Documentation standards for reRT when there is no concern for side-effects	
Recommended standard	
1 Previous and current radiation anatomical treatment sites (including laterality, where applicable), treatment dates, and the reason there was no concern (eg, low cumulative doses or non-overlapping)	
Documentation standards for reRT when there is concern for side-effects	
Recommended standards, as applicable and achievable†	
1 Previous and current radiation anatomical treatment sites (including laterality, where applicable), target prescription doses, treatment techniques and modalities‡, and treatment dates	
2 Any radiobiological parameters applied, if applicable (eg, α/β , radiobiological effectiveness, TRF)	
3 Method(s) used to register imaging datasets	
4 Method(s) used to calculate cumulative dose	
5 Evaluation of uncertainties in the dose accumulation process§	
6 OAR-specific, dose-volume histograms-based dose metric estimates, dose type as specified:	
Previous relevant treatment(s)	Physical
Current treatment(s)	Physical
Cumulative dose	Equieffective
Cumulative dose with TRF (if applicable)	Equieffective
7 Patient informed consent for reRT risks, documentation of shared decision making, and discussion of alternative treatment strategies considered ²⁶	
Optional standards, as applicable	
1 Visual documentation of the degree of overlap between relevant treatment plans, such as with axial, coronal, and sagittal colour dose images centred on clinically relevant regions and normal tissues	
2 Cumulative equieffective dose-volume histograms for relevant organs at risk	
For research cohorts only	
Recommended standard	
1 Whenever possible, report patient-specific, per-plan, and cumulative 3D dose and/or cumulative dose-volume histogram data including uncertainties¶	

Future Updates to Reirradiation Documentation

- Dose Assessment Recommendations



Future Updates to Reirradiation Documentation

Current Measure:

Increase the rate of physics consultation for bone metastases reirradiation.*

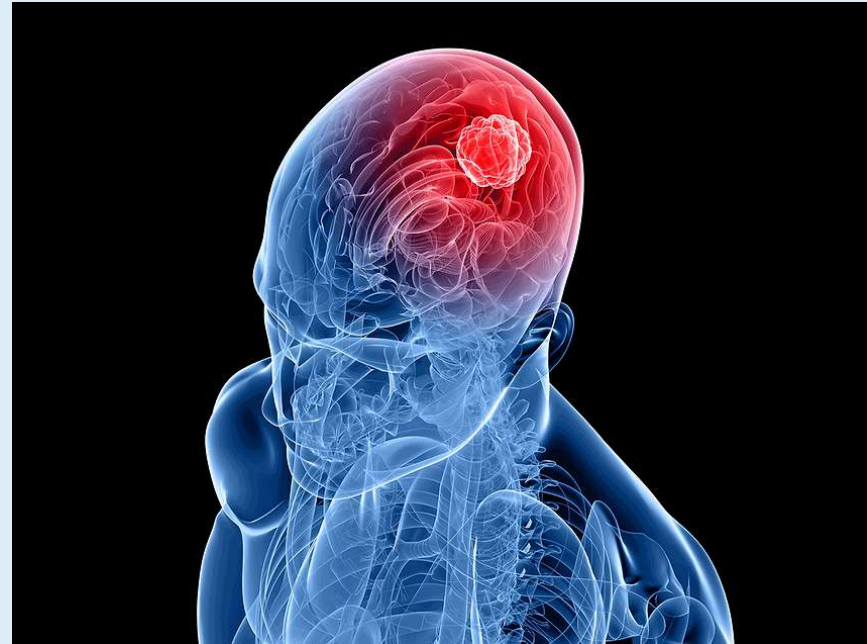
**For cases where there is concern for toxicity due to cumulative dose (Type 1 or Type 2 reirradiation), the physics consult must occur prior to physician approval. For Type 1 reirradiation cases with no concern for toxicity, the consult must occur prior to the start of treatment*

Adjusted Measure:

Increase the rate of recommended dose assessment and documentation for bone metastases reirradiation

- Change “toxicity” to “side-effects”, remove language about Type 1 and Type 2
- Remove “must occur prior to start of treatment”

Brain Mets Future Directions & Data Collection

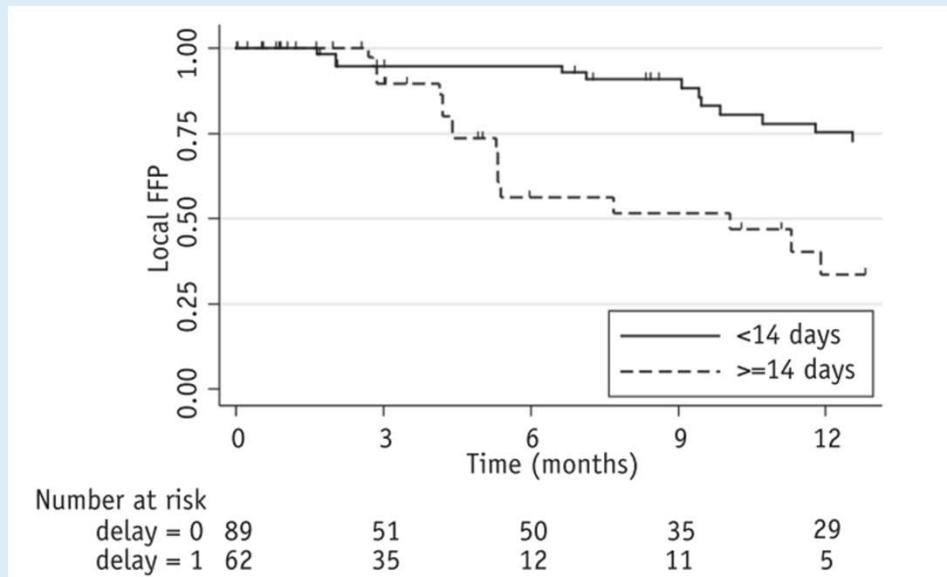


Starting Focus Areas

Quality of Treatment Delivery for Brain Mets Patients

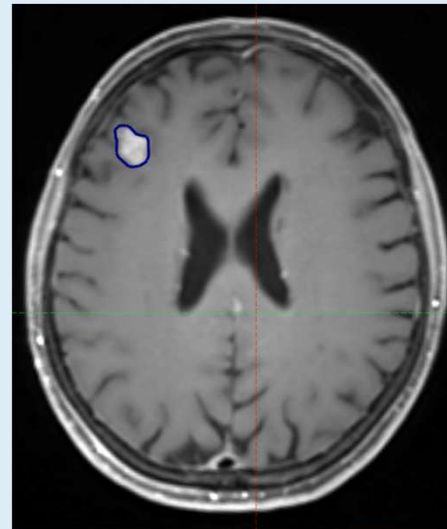
- Pretreatment MRI: sequences utilized, timing between scan and delivery

NCCN recommends interval between MRI to treatment ≤ 2 weeks

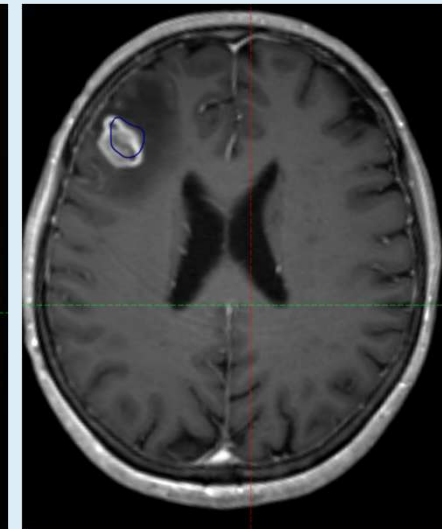


Seymour et al 2014 IJROBP

Day 1



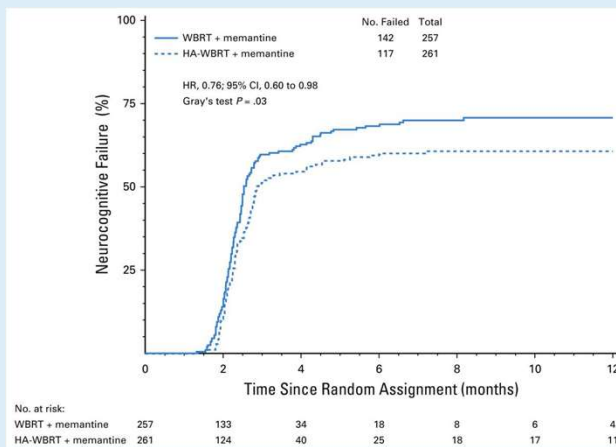
Day 13



Starting Focus Areas

- **Quality of Life for Patients: Neurocognitive Preservation**

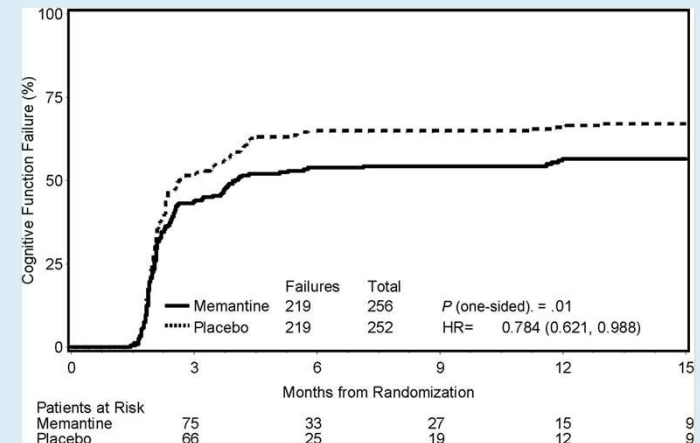
- Utilization and quality of HA-WBRT



NRG CC001

HA-WBRT preserved cognitive function compared to WBRT

- Real world utility/implementation of memantine?



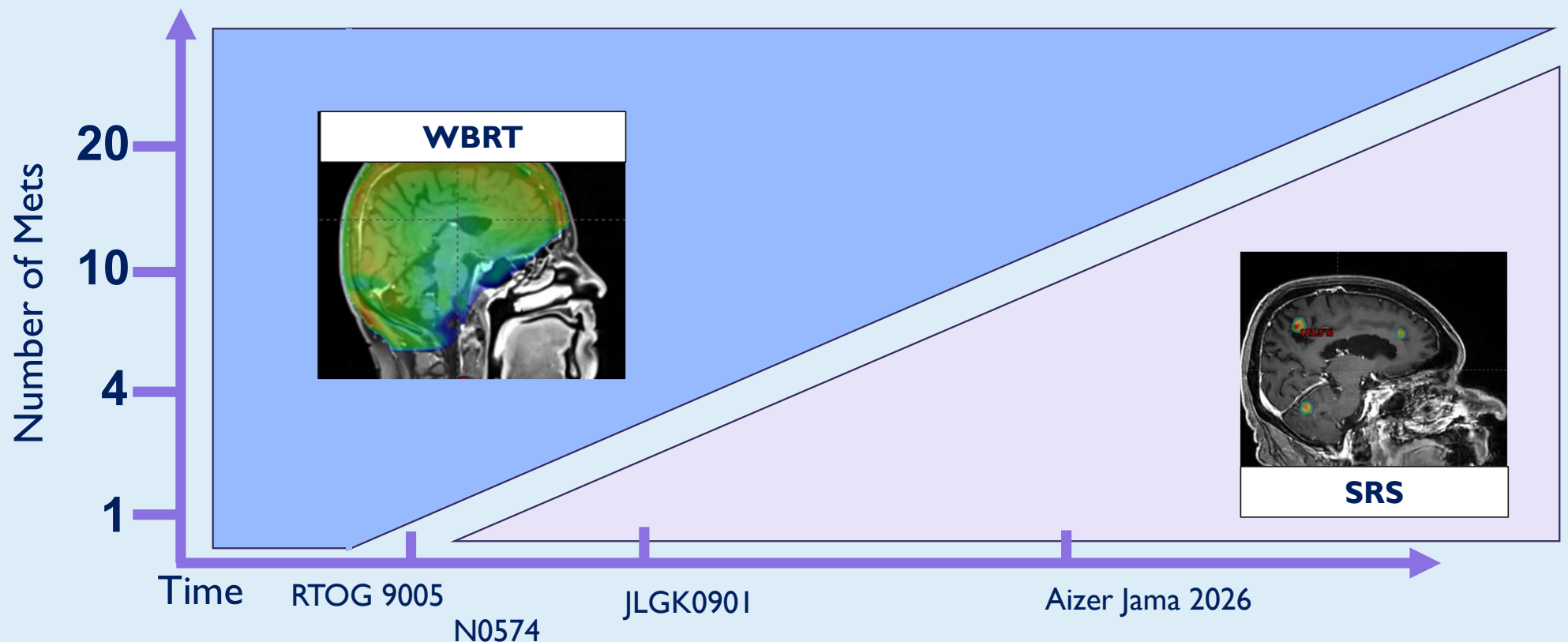
RTOG 0614

memantine delayed time to cognitive decline

Starting Focus Areas

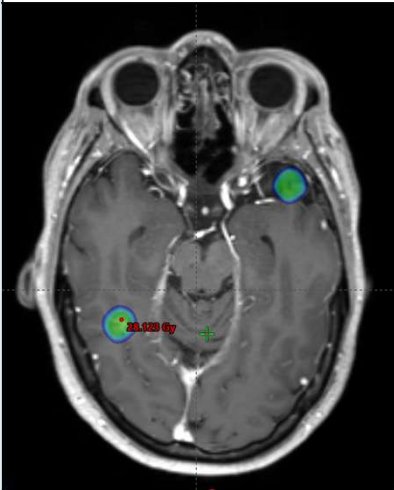
- **Quality of Life for Patients: Neurocognitive Preservation**

- Minimizing treatment footprint (number of mets influencing decision for SRS vs HA-WBRT)

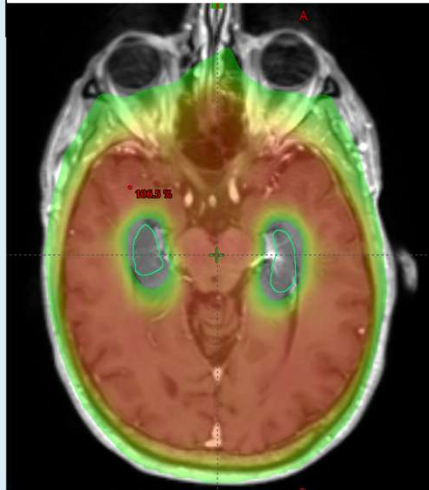


Brain Mets-Exclusion Criteria

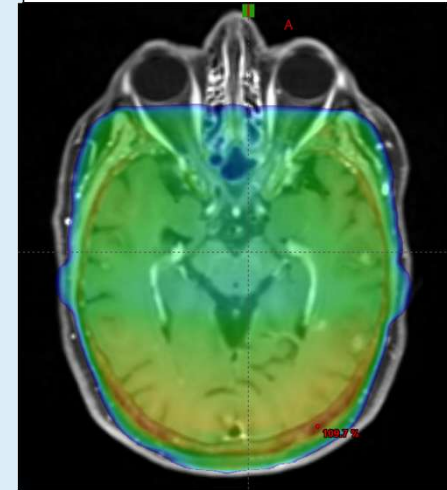
SRS (fSRS)



**Hippocampal avoidant
Whole Brain RT**



Whole Brain RT



Exclusion Criteria

- age < 18
- leptomeningeal disease (as defined per ESTRO guidelines), or suspicion thereof by treating physician
- primary cancer diagnoses of small cell lung cancer or non-solid tumors (hematologic malignancies such as multiple myeloma, lymphoma, leukemia)
- patients unable to undergo regular MRIs (claustrophobia requiring anesthesia, pacemaker)

Overview of Forms

- One-time physics form for each site (not needed for each patient): capturing general details of treatment (immobilization, treatment planning etc)
- Will create repeat treatment/same patient form (ie frequent flier form—eliminating repeat baseline information)

Baseline:

- Clinical physician form
- Clinical CDA form
- Patient/caregiver PRO

3 months (likely correlated to **follow up visit**)

- Brief Physician form (CTCAE toxicity, NANO)
- Brief CDA form
- Patient/caregiver PRO

Treatment details: physics form

1 year (not tied to clinical visit, just **chart review**)

- Physician form (Cancer related treatment outcomes, necrosis, etc)

PROs

- Unique population—they have **significant QoL impacts** from their disease; may not directly be able to engage in PROs (due to cognitive impairment) and so we are proposing **caregiver** forms
- We follow these patients **more closely** than bone mets, so believe this data will be able to be captured (most will have a 2-3 mo post RT visit, so we are proposing baseline and 3 mo)

Physics Forms

- Initial Mets Program Questionnaire
- Individual Patient
 - Dicom upload: MR (T1-weighted post contrast), RT Plan, RT Dose, RT Structure Set
 - Physics Form: Diagnostic Imaging, Simulation, Treatment Planning, Treatment Delivery

Feedback Wanted!

**Brain Mets
Baseline Clinical
Data Forms**




**Institutional
Questionnaire and
Physics Brain Mets
Form**





Join Us!



Our next meeting will
be on
Monday, June 22nd
from 3:00-3:30 p.m.



M-EQUAL UPDATE

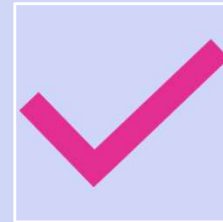
Renu Sharma, MS

5/15/2026

AGENDA



PERFORMANCE
METRIC REVIEW



2026 GOALS

2026 CANNABIS EDUCATION VBR MEASURE

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 between January 1, 2026, and September 30, 2026, who report cannabis use within the 30 days prior to their treatment start date.

Incentive Program: CQI –VBR



Cannabis Education For All Facilities in 2026

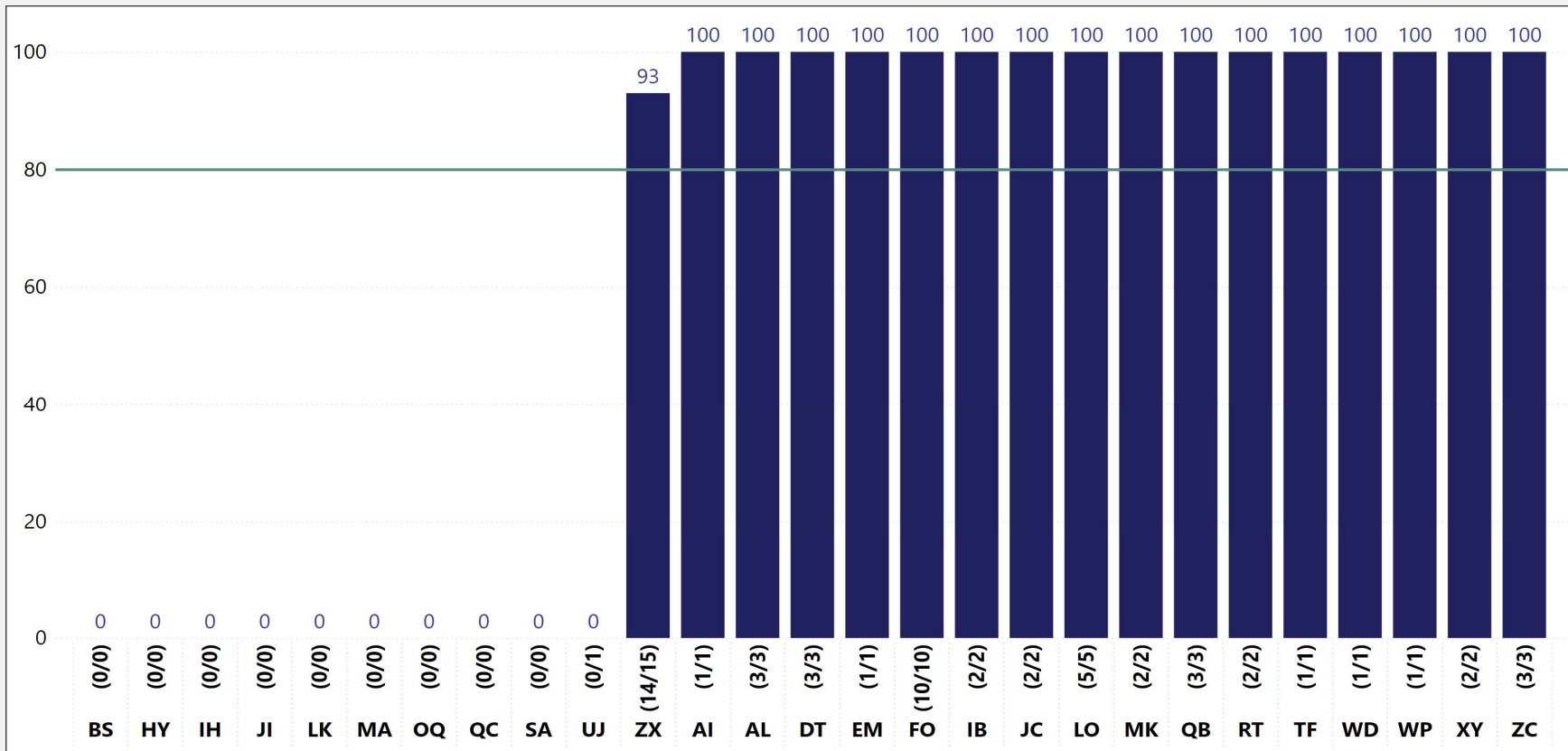
Associated Incentive Program: CQI VBR



DATA UP TO DATE AS OF 05/04/2026

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%



2026 M-EQUAL PRIORITIES

Race Data Comparison

Comparing abstractor-recorded and patient-reported race data to evaluate consistency across facilities, with findings targeted for abstract submission.

Social Needs Data Expansion

Exploring new screening questions around food insecurity, transportation, and housing to better understand patient barriers to care.

Community Partnerships

Building connections with organizations like 2-1-1 and the Michigan Department of Health to link patients with resources and support.

GET INVOLVED WITH M-EQUAL



We want to hear from you

Have feedback on our priority areas? Interested in contributing to one of our 2026 projects? We welcome input from across the collaborative



Join the Committee

MROQC is committed to identifying and addressing gaps in care experienced by our patients, and M-EQUAL leads that work. We meet bi-monthly and welcome members from all roles and all facilities.





ROQCSTAR REPORT

Melissa Mietzel, MS

May 15, 2026

Tools &
Resources



ROQCstar
Awards



TODAY'S
REPORT





TOOLS & RESOURCES



New MROQC Lung Contouring Resources

Lung OAR Contouring Videos

Great Vessels

Great Vessels
Contouring the
Great Vessels
MROQC 2024

Proximal Bronchial Tree

Proximal
Bronchial
Tree
Contouring
MROQC 2024

Chestwall

Chestwall
Contouring the
Chestwall
MROQC 2024

NOTE: Details of Great Vessels and Proximal Bronchial Tree contouring guidelines shared in 2024.

NOTE: Details of Chestwall contouring guidelines shared in 2024.

MROQC has developed new OAR contouring training videos for Lung treatment planning

Goal

- Promote consistent contouring practices across the collaborative
- Support treatment planning and quality improvement

Access the Videos

Available on the MROQC website:

 www.mroqc.org/lung-resources

The background of the image is a dark blue, textured surface covered with numerous five-pointed stars. The stars are embossed or raised, creating a three-dimensional effect with shadows. The overall color palette is monochromatic, ranging from deep navy to a slightly lighter, muted blue.

ABOVE &
BEYOND
ROQCSTAR
AWARDS

ABOVE & BEYOND ROQCSTAR AWARDS

Celebrating Excellence Across MROQC

Recognizing individuals and teams who have gone above and beyond through:

- Outstanding collaboration
- Commitment to data quality
- Innovation & problem-solving
- Member support & engagement
- Special project contributions
- Dedication to improving patient care across Michigan

Thank You for Making MROQC Stronger Together

Award recipients will be invited to the front as their names are announced



CLINICAL DATA QUALITY CHAMPION AWARD

Recognizes facilities demonstrating a strong commitment to data quality through consistent abstraction accuracy, timely follow-up, and overall performance on clinical data quality review processes.

- Munson CDA Team
- Amber Tucker, WMCC
- Brenda Havey, McLaren Northern
- Genesys Hurley CDA Team
- Sarah Paluch, Covenant HealthCare
- Trinity Health Saint Mary's CDA Team
- Kathy Lapansie, Henry Ford St. John Hospital

SUPPORT ROQCSTAR AWARD

Recognizes a CDA who consistently engages with support, asks thoughtful questions, and helps improve data quality through proactive communication and problem-solving.

- PJ Hensley, Michigan Medicine
- Jen Davis, Munson
- Doris Ethier, Genesys Hurley
- Jordan Parisian, Trinity Health Mercy Muskegon

COLLABORATION IN ACTION AWARD

Recognizes CDAs who consistently engage with the MROQC team by contributing in working group meetings, sharing feedback, asking questions, and helping improve workflows and processes.

- Michigan Medicine CDA Team
- Liza Morris, MyMichigan
- Jasmine Bumpus, McLaren Greater Lansing
- Munson CDA Team
- Henry Ford Providence CDA Team

SUSTAINED PHYSICS DATA QUALITY AWARD

Excellent mid-year data
quality
(physics data quality
rate of 100% as of
5/1/26)

- McLaren Bay Region
- UM Health-Sparrow
- Trinity Health Mercy Muskegon
- Covenant HealthCare
- McLaren Northern
- Henry Ford Jackson
- Henry Ford St. John

PHYSICS HDR RETROSPECTIVE SPECIAL PROJECT AWARD

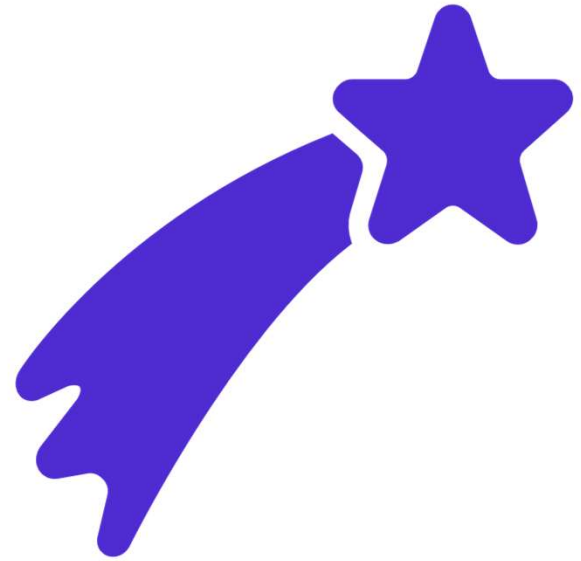
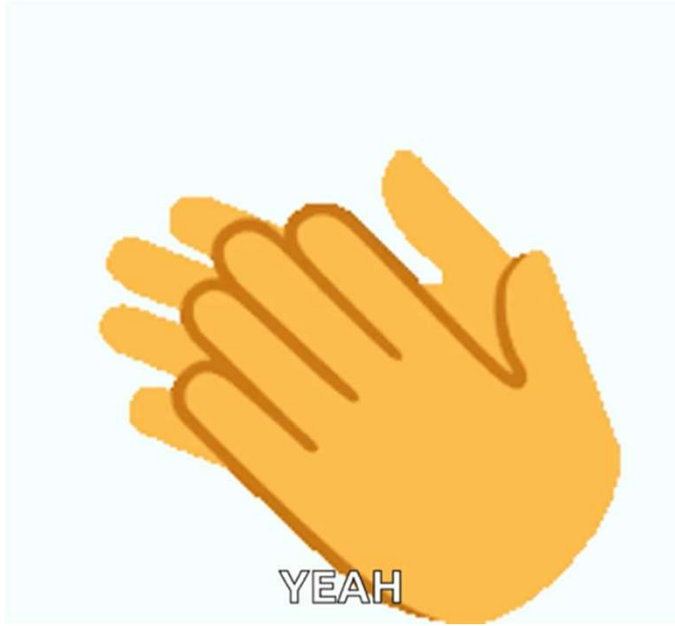
Special effort to
submit retrospective
HDR DICOM data

- Michigan Health Professionals
- Henry Ford Warren

TG-263 ROQCSTAR AWARD

Most consistent
use of TG-263
nomenclature

MyMichigan Midland



CONGRATULATIONS! |

LUNCH

Enjoy!!!

Breakouts will begin at 1:30 p.m.

Breakout Locations:

- Physician & Facility Administrators *Main Room*
- Physics & Dosimetry *55 ALPHA*
- CDA *40 GAMMA*





CLOSE

May 15, 2026



THANK YOU FOR
ATTENDING
TODAY'S MEETING!

SPECIAL
THANKS!



REMINDER FOR PHYSICIST CAMPEP CREDIT



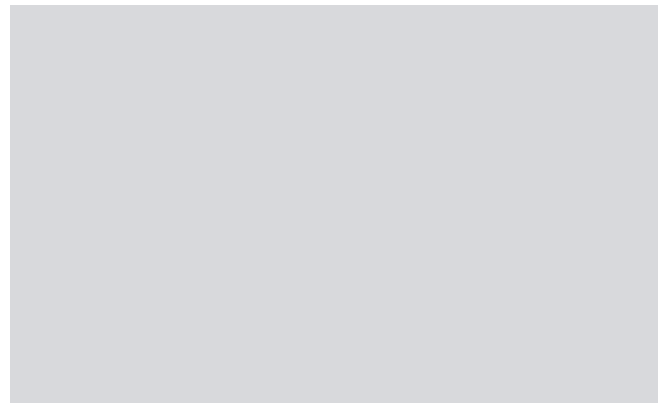
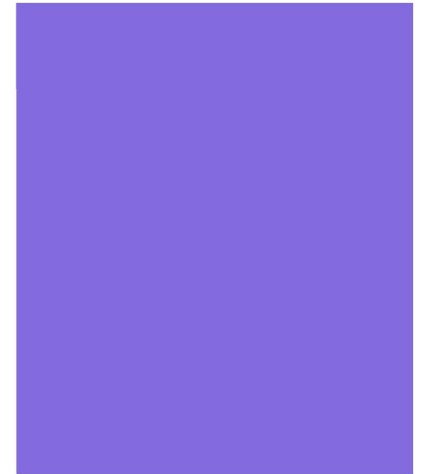
If you plan to claim CAMPEP credit, please be sure to submit the Program Evaluation and Speaker Evaluation before leaving today's meeting.



Documentation must be submitted **today** to receive credit.

POST-MEETING SURVEY

Please take the
MROQC Post-
Meeting
Feedback
Survey



PLEASE RETURN
YOUR BADGE
AS YOU EXIT
THE MEETING

Lori Pierce
MROQC Coordinating Center





REGISTRATION

2026 SUMMER SCHOOL

ADAPTIVE RADIOTHERAPY: Transforming Technology, Modern Practice, and Clinical Impact

JUNE 16–20 | UNIVERSITY OF MICHIGAN



IN-PERSON WITH ON-DEMAND ACCESS

- Admission to Didactic Sessions
- Breakfast, Lunches, Dinner & Breaks
- One (1) Summer School T-Shirt
- One (1) Proceedings Book
- On-Demand Recordings of Sessions
- Ability to Earn Continuing Education Credits

REGISTRATION & HOUSING OPEN:
MARCH 9, 2026

REGISTRATION CATEGORIES

- Full
- General/Affiliate
- Full-Lifetime
- Associate
- Associate-Student
- Resident of Low/Low-Middle Income Country (LMIC)

Early Bird Registration Deadline:
May 18, 2026



LEADERSHIP

2026 SUMMER SCHOOL

ADAPTIVE RADIOTHERAPY: Transforming Technology, Modern Practice, and Clinical Impact

JUNE 16–20 | UNIVERSITY OF MICHIGAN



SUMMER SCHOOL



**VRINDA NARAYANA,
PHD, FAAPM**
UNIVERSITY OF MICHIGAN



COLLEEN FOX, PHD
DARTMOUTH HEALTH



**LAURA CERVINO,
PHD, FAAPM**
MEMORIAL SLOAN KETTERING
CANCER CENTER



**DANDAN ZHENG,
PHD, FAAPM**
UNIVERSITY OF ROCHESTER



HENG LI, PHD, FAAPM
JOHNS HOPKINS MEDICINE



XIUXIU HE, PHD
MEMORIAL SLOAN
KETTERING CANCER CENTER



CLAIRE PARK, PHD
MASS GENERAL BRIGHAM,
HARVARD MEDICAL SCHOOL



SAVE THE DATE

15 Years

of Collaboration, Innovation,
and Statewide Impact

2011

2026



Anniversary Celebration

Recognizing the people and partnerships that built MROQC



Future of RT

AI, innovation, and emerging applications of radiation therapy



Looking Ahead

Helping shape the next chapter of quality improvement together

Celebrating the past. Defining what's next.

Friday, October 30, 2026 • VistaTech Center | Schoolcraft College

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

