The National Association for Proton Therapy

McDermott+ Consulting

RADIATION ONCOLOGY ALTERNATIVE PAYMENT MODEL EXECUTIVE SUMMARY

On September 18, 2020, the Centers for Medicare and Medicaid Services ("CMS") released the much anticipated Radiation Oncology Alternative Payment Model ("RO Model") Final Rule. The Final Rule can be accessed here.

This executive summary outlines the specific provisions in the Specialty Care Models – specifically on the Radiation Oncology Alternative Payment Model (RO Model). The document is not intended to necessarily represent the entirety of the model from CMS but rather, the areas of focus for NAPT and its members.

MODEL PURPOSE

- The RO Model was created to promote quality and financial accountability for providers and suppliers of radiotherapy (RT) services.
- With the final model design, CMS is seeking to test whether making prospective episode payments to hospital outpatient departments (HOPD), freestanding radiation therapy centers, and physician group practices for radiation therapy episodes of care *preserves or enhances the quality of care furnished to Medicare beneficiaries while reducing Medicare program spending through enhanced financial accountability* for RO Model participants.
- CMS estimates that with the modifications to the RO Model between the Proposed and Final rule, the expected savings are $230 million.

EXECUTIVE SUMMARY

Model Scope

- The RO Model is mandatory.
- **Geographic Areas**. CMS randomly selected the geographic areas in the model; the selection area is based on Core Based Statistical Areas (CBSA):
  - CMS will use the five-digit ZIP codes that participants use on claims submissions. These ZIP codes are linked to the CBSA to determine if the participant is or is not in the RO Model.
  - The zip codes included in the RO Model can be found on the CMMI Radiation Oncology Model website here.
  - The intended goal for the RO Model is to comprise approximately 30 percent of eligible radiation oncology episodes.
  - A provider (any PGP, freestanding radiation therapy center, or HOPD) in one of the selected geographies can opt-out if they have furnished fewer than 20 episodes in one or more of the CBSAs randomly selected for participation in the most recent year with claims data available.
- **Timeline**. The RO Model will run for 5 years, from CY 2021 through CY 2025. CMS is implementing the RO Model as of January 1, 2021.
- **Applicable modalities**. Modalities included in the RO Model include:
  - 3-dimensional conformal radiotherapy
  - Intensity-modulated radiotherapy (IMRT)
  - Stereotactic radiosurgery (SRS)
  - Stereotactic body radiotherapy (SBRT)
  - Proton beam therapy (PBT)
  - Image-guided radiation therapy (IGRT)
  - Brachytherapy

  The payment rate for RT services furnished in the RO Model would be the same regardless of the modality.

- **Applicable Services**. The RO Model is an episode-based bundled payment for RT services furnished in a hospital outpatient department (HOPD) or freestanding RT center, including:
  - Treatment planning
  - Technical preparation
  - Special services
  - Treatment delivery
  - Treatment management

  It is not a total cost of care model. Consultation services such as evaluation and management services will continue to be reimbursed separately (*i.e.*, payment for those services are not included in the bundle and will continue to be billed under Medicare Fee-For-Service (FFS)). CMS is also excluding what it considers to be low volume RT services from the bundled payment, including certain brachytherapy surgical procedures, neutron therapy, hyperthermia treatment, and radiopharmaceuticals.

  The list of included codes (CPT and HCPCS) in the RO payment bundle can be found in Table 2 of the Final Rule.
- **Episode Triggers**. CMS has defined the trigger for an episode as the beneficiary receiving initial treatment planning services furnished by an RO participant followed by treatment delivery services furnished by an RO participant within 28 days of the initial planning service.
  - Treatment planning services are defined as CPT codes 77261 – 77263.
  - The first day of the episode is the day that treatment planning services are rendered and continues for an additional 89 days in order to have a 90-day episode.
  - If no radiation therapy treatment is received within 28 days of initial treatment planning, it is not be considered an RO episode and the episode incomplete policy would take effect.
  - A new episode of care cannot be initiated for that patient within 28 days of the end of the previous episode.
  - If an episode runs longer than 90 days, the RO participant can bill the end of episode (EOE) modifier and additional RT services would be paid on a fee-for-service basis.
- **Applicable cancer types**. The RO Model applies to 16 different cancer sites commonly treated with radiation therapy and that have existing ICD-10-CM codes. While kidney cancer was included in the Proposed Rule as an applicable cancer type, it was excluded from the Final Rule. The applicable cancer types include the following:

Anal cancer	Bladder cancer	Bone metastases	Brain metastases
Breast cancer	Cervical cancer	CNS tumors	Colorectal cancer
Head and neck cancer	Liver cancer	Lung cancer	Lymphoma
Pancreatic cancer	Prostate cancer	Upper GI cancer	Uterine cancer

  Table 1 in the Final Rule lists the specific ICD-10-CM codes.
- **Types of Participants**. CMS identifies three different types of participants for this model:
  - Professional component (PC): Physician delivering the PC in HOPD or freestanding center
  - Technical Participant (TC): HOPD or freestanding center that delivers the TC
  - Dual Participant: Freestanding center that delivers both the PC and TC of the service
- **Exclusions**. The model does not apply to PPS-exempt cancer hospitals, critical access hospitals, or ambulatory surgical centers (ASCs). It would also not apply to providers who furnish services only in Maryland, Vermont, or U.S. territories, or if the provider participates in or is eligible to participate in the Pennsylvania Rural Health Model.
  - Regarding the PPS-exempt cancer hospitals (PCH), a physician is exempted from the RO Model if they only practice at the PCH. If a physician provides services at other freestanding radiation therapy centers or HOPDs that are included in the selected CBSAs, the physician will be considered a professional or dual participant in the RO Model.
  - There is no hardship exemption in the Final Rule but a PGP, freestanding radiation therapy center or HOPD may choose to there is an option for opt-out of the RO Model if it provides a

for low volume of RT services (namely, it provides fewer than 20 episodes of RT services across all CBSAs selected for participation).
  - The Final Rule does not discuss whether a provider outside of the selected geographic area could opt into the RO Model.

- **Beneficiaries**. The RO Model will apply to any beneficiary who received RT services in one of the selected geographic areas and who, at the time of receiving services, has traditional Medicare Fee-For-Service as their primary payer. The RO Model does not apply if the beneficiary is:
  - Enrolled in a Medicare managed care plan including Medicare Advantage;
  - Enrolled in a PACE (Programs of All-Inclusive Care for the Elderly) plan;
  - Enrolled in Medicare FFS but in a Medicare hospice benefit period; or
  - Covered under United Mine Workers.

  For beneficiaries that meet the criteria above, the beneficiary would be included in the RO Model if the patient receives RT services from an RO Model participant that billed the start of episode (SOE) modifier for the professional or technical component of an episode during the Model period for an included cancer type.

  There is an exclusion if RO beneficiary is participating in a federally-funded, multi-institutional randomized control clinical trial for proton beam therapy.

Payment Methodology

- **Site Neutrality**. Under the RO Model, the payment rates are site neutral (*i.e.*, the same rates apply regardless of whether the services are rendered in a HOPD or freestanding RT center). The payments rates will vary based on the type of cancer and professional/technical component.
- **Payment Methodology**. CMS uses a multi-step process to calculate the applicable payment rates for each participant. Specifics of the methodology are discussed below.

#	Step Description	Step Details
1	Calculate national base rates	▪ National base rates are calculated using data from CYs 2016 – 2018. Base rates are calculated only based on HOPD claims data; freestanding center claims are excluded. ▪ National base rates apply for all five years unless CMS decides to do a national rebasing.
2	Trend factor	▪ This factor accounts for trends in volume of services and payment rates paid by OPPS and the MPFS to providers NOT in the model. ▪ Separate trend factors are calculated for each cancer type and for the professional and technical components. ▪ Example of the calculation for the first plan year (PY) is listed below: PY Trend Factor = $\frac{\text{2018 Volume * 2021 FFS OPPS/MPFS Rates}}{\text{2018 Volume * 2018 FFS OPPS/MPFS Rates}}$
3	Geographic adjustment	▪ CMS will apply geographic adjustments to the payments based on the locality of the participant. Under OPPS, the geographic adjustments will apply per the standard process. The adjustment under PFS will be based on the proposed relative weight of the model specific RVU share.

#	Step Description	Step Details
4	Case mix, historical experience, and efficiency adjustments	▪ These adjustments are intended to account for each RO participant's historical care patterns and case mix of patients compared to the national beneficiary profile. ▪ The case mix adjustments are designed to adjust payment rates for demographic characteristics, presence of chemotherapy, presence of major procedures and death rates and will be calculated as the difference between an RO participant's predicted payment and an RO participant's expected payment, divided by the expected payment. To calculate the expected payment, CMS will use a regression model that calculates expected payment amounts based solely on cancer type. ▪ Historical experience for the participant will be adjusted by an efficiency factor calculated based on actual payments compared to predicted payments based on case mix. The historical experience of a participant classified as efficient will have more weight than an inefficient provider in the later years in the model. ▪ Participants with fewer than 60 episodes in the baseline period (2016 – 2018) will not receive the historical experience adjustment or case mix adjustment in PY 1. CMS is adopting a stop-loss limit of 20% for these participants. ▪ CMS will provide RO participants their case mix and historical experience adjustments prior to the start of the program year. ▪ Participants with no historical experience adjustment will receive a historical experience adjustment of 0.0 and thus be deemed efficient (90/10 for relevant year). For centers that are inefficient, the efficiency adjustment (or blend as referred to in the Final Rule) is as follows: – PY 1 – 90/10 – PY 2 – 85/15 – PY 3 – 80/20 – PY 4 – 75/25 – PY 5 – 70/30 ▪ A net adjustment based on these different components would be calculated as follows: $\text{Comb. adjustment} = \frac{\text{(Historical experience * Efficiency)}}{\text{Case Mix}}$ ▪ Stop loss policy: CMS will pay these RO participants retrospectively for losses in excess of 20 percent of what they would have been paid under FFS. Payments under the stop-loss policy are determined at the **time of reconciliation**. See the Appendix for examples of calculations of the historical experience adjustment (Tables 5 – 6 in the Final Rule).
5	Discount factor	CMS will apply a discount factor which will reserve savings for Medicare and reduce beneficiary cost-sharing. This discount factor will not vary by cancer type but will differ for PC (3.75%) versus TC (4.75%).

#	Step Description	Step Details
6	Withholds	CMS will apply multiple types of withholds in the rate calculation: ▪ Incorrect payment. This withhold reserves funds to address overpayments due to duplicate services and incomplete episodes. The withhold amount (dropped from 2% in the Proposed Rule to 1% in the Final Rule) could be fully or partially recouped during the annual reconciliation process. ▪ Quality. This withhold allows for quality measure results to impact the payment to participants under this RO Model, a criteria for an Advanced APM. Professional and dual participants will have a 2% withhold that could be earned back based on their aggregate quality score (AQS). ▪ Patient Experience. This withhold (1%) applies to technical and dual participants and will be applied beginning in Plan Year (PY) 3 (2023). Similar to quality and incorrect payment, participants could earn back up to the 1% - based on their performance – during the annual reconciliation process.
7	Beneficiary coinsurance	▪ Beneficiaries will pay 20 percent of each of the professional and technical components for their cancer type. This coinsurance is a continuation of existing policy under Medicare FFS and is calculated after application of any case mix and historical experience adjustments, withholds, discount factors and geographic adjustments. ▪ For episodes deemed incomplete, beneficiary coinsurance will be 20% of the FFS amount for RT services received during the incomplete episode.
8	Sequestration	The remaining 80 percent of the payment rate would be adjusted for sequestration (2%) per the existing processes.

Tables 8 and 9 in the Final Rule walk through specific examples for how to calculate the payment rates.

- **Finalized National Base Rates**. CMS finalized the following national base rates by cancer type and component by taking a weighted average of CY 2016 – 2018 data (20% of 2016 rates, 30% of 2017 rates, and 50% of 2018 rates). While the Proposed Rule utilized baseline data from 2015-2017, the Final Rule utilizes 2016-2018. In addition, CMS will provide each RO participant with its case mix and historical experience adjustment for both the professional and technical components at least 30 days before the start of each PY.

  Note: These finalized base rates are slightly higher than the base rates in the Proposed Rule.

Cancer Type	Professional Component		Technical Component	
	HCPCS Code	Base Rate	HCPCS Code	Base Rate
Anal cancer	*MXXXX*	$ 3,001.19	*MXXXX*	$ 16,543.53
Bladder cancer	*MXXXX*	$ 2,688.35	*MXXXX*	$ 13,291.62
Bone metastases	*MXXXX*	$ 1,398.14	*MXXXX*	$ 5,971.73
Brain metastases	*MXXXX*	$ 1,601.70	*MXXXX*	$ 9,648.92
Breast cancer	*MXXXX*	$ 2,081.47	*MXXXX*	$ 10,128.61
Cervical cancer	*MXXXX*	$ 3,829.34	*MXXXX*	$ 17,581.18
CNS tumors	*MXXXX*	$ 2,510.55	*MXXXX*	$ 14,711.14
Colorectal cancer	*MXXXX*	$ 2,449.38	*MXXXX*	$ 12,039.84
Head and neck cancer	*MXXXX*	$ 3,019.00	*MXXXX*	$ 17,485.19

Cancer Type	Professional Component		Technical Component	
	HCPCS Code	Base Rate	HCPCS Code	Base Rate
Liver cancer	*MXXXX*	$ 2,082.23	*MXXXX*	$ 11,976.09
Lung cancer	*MXXXX*	$ 2,181.23	*MXXXX*	$ 11,993.83
Lymphoma	*MXXXX*	$ 1,690.41	*MXXXX*	$ 7,854.53
Pancreatic cancer	*MXXXX*	$ 2,394.14	*MXXXX*	$ 13,384.14
Prostate cancer	*MXXXX*	$ 3,260.97	*MXXXX*	$ 20,248.82
Upper GI cancer	*MXXXX*	$ 2,585.57	*MXXXX*	$ 13,530.21
Uterine	*MXXXX*	$ 2,435.59	*MXXXX*	$ 11,869.29

The RO-Model specific HCPCS codes will be published at least 30 days prior to the start of the model.

- **Billing and Payment**. Model participants will bill an RO Model-specific HCPCS code (to be published prior to the start of the model) with a Start of Episode (SOE) modifier to signal the beginning of the episode. Upon submission of that claim, CMS will pay the first half of the payment rate. The participant must bill the same RO Model-specific HCPCS code with End of Episode (EOE) modifier to signal the end of the clinical episode. CMS will issue the second payment installment upon processing of this second claim. Based on a modification to the Proposed Rule, participants do not have to wait until the end of the 90 days to submit a claim with the EOE modifier. However, the claim with the EOE modifier should not come before 28 days after the initial treatment planning service.

- **Reconciliation**. The RO Model will have two reconciliation processes. The first reconciliation process ("the initial reconciliation") will occur as early as August after the end of the PY (i.e., August 2022 for PY 1 (2021)). CMS will conduct a second reconciliation (the "true-up" reconciliation) after the initial reconciliation to calculate additional payments or repayments for incomplete episodes and duplicate RT services that are identified after a 12-month claims run-out for all RO episodes initiated in the applicable PY. The true-up reconciliation will only relate to the incorrect payment withhold. The intent of these reconciliation processes is to identify money either owed to or owed by the RO Model participant. Table 14 in the Final Rule walks through an example of the reconciliation process.

Quality Measures

- CMS has finalized the adoption of four quality measures for PY 1 under the model to assess quality of care:
  - Oncology: Medical and Radiation – Plan of Care for Pain (NQF #0383, CMS Quality ID #144)
  - Preventive Care & Screening – Screening for Depression and Follow-Up Plan (NQF #0418, CMS Quality ID #134)
  - Advance Care Plan (NQF #0326, CMS Quality ID #047)
  - Treatment Summary Communication – Radiation Oncology

  These measures will be reported in aggregate (not at the beneficiary level) and that the measures are reported for all patients, not limited to patients in the RO Model. Additional measures could be proposed for subsequent plan years as part of the annual notice and comment process. RO participants will submit data beginning in March 2022, based on RO episodes in PY 1.
- Starting in Plan Year 3, CMS will require technical participants to complete the CAHPS Cancer Care Survey for Radiation Therapy. The applicable questions and measures from the survey will be discussed in future rulemaking.
- CMS is adopting these measures in order to quantify the impact of the model of quality of RT care. Also, the inclusion of these quality measures will meet the quality related requirements for an Advanced APM and a MIPS APM.

- In addition to these quality measures and surveys, CMS will require participants to submit additional clinical data not available through claims data or quality measures. The clinical data will be for patients with prostate cancer, breast cancer, lung cancer, bone metastases or brain metastases. Clinical data will be submitted through the RO Model portal at a time and in a manner specified by CMS. Specific elements to be submitted to CMS will be defined to PY 1 of the RO Model and will be communicated on the RO Model website.
- Table 11 of the Final Rule, presented below, outlines the quality measures, clinical data and reporting requirements.

Quality Measure / Clinical Data	Level of Reporting	Pay-for Reporting	Pay-for Performance
Oncology: Medical and Radiation - Plan of Care for Pain	Aggregate	N/A	PYs 1 – 5
Preventive Care & Screening – Screening for Depression and Follow-Up Plan	Aggregate	N/A	PYs 1 – 5
Advanced Care Plan	Aggregate	N/A	PYs 1 – 5
Treatment Summary Communication – Radiation Oncology	Aggregate	PYs 1 – 2	PYs 3 – 5
CAHPS Cancer Care Survey for Radiation Therapy	Patient-Reported	N/A	PYs 3 – 5
Clinical Data	Beneficiary-Level	PYs 1 – 5	N/A

- As discussed above, RO Model participants could earn up the full withhold for quality or patient experience based on their Aggregated Quality Score (AQS) which would be determined based on how the participants performed for each measure and based on the clinical data submitted.

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Please direct any questions or comments on the model to Jennifer Maggiore (jmaggiore@proton-therapy.org) or Deborah Godes (dgodes@mcdermottplus.com).

APPENDIX

RO Participant with Historical Experience (see Table 5 in the Final Rule)
(Adjustment *equal to or below 0.0* (efficient))

National Base Rate	$ 15,000
RO Participant 1 Average	$ 14,000
90/10 (PY 1 – PY 5)	$ 14,100

RO Participant with Historical Experience (see Table 6 in the Final Rule)
(Adjustment *above* 0.0 (efficient))

National Base Rate	$ 15,000
RO Participant 1 Average	$ 30,000
90/10 (PY 1)	$ 28,500
85/15 (PY 2)	$ 27,750
80/20 (PY 3)	$ 27,000
75/25 (PY 4)	$ 26,250
70/30 (PY 5)	$ 25,500

National Base Rate	$ 15,000
RO Participant 1 Average	$ 20,000
90/10 (PY 1)	$ 19,500
85/15 (PY 2)	$ 19,250
80/20 (PY 3)	$ 19,000
75/25 (PY 4)	$ 18,750
70/30 (PY 5)	$ 18,500

Example Reconciliation for a Professional Participant (see Table 14 in the Final Rule)

Professional Participant	**Formula**	**Example**
Sum of episode payment amounts (after trend factor, adjustments, and discount factor have been applied)		$ 300,000
Total Incorrect Payment Withhold Amount (a_1)	a_1	$ 3,000
Total Duplicate RT Services Amount (a_2)	a_2	($ 3,000)
Total Incomplete Episode Amount (a_3)	a_3	($ 1,500)
Incorrect Episode Payment Reconciliation Amount (a)	$a = a_1 + a_2 + a_3$	($ 1,500)
Quality Withhold (b_1)	b_1	$ 6,000
AQS (b_2)	b_2	0.85
Quality Reconciliation Amount (b)	$b = b_1 * b_2$	$ 5,100
Stop-Loss Reconciliation Amount (c)	c	$ 0
Reconciliation Payment/(Repayment Amount, if this were to be negative, indicating an amount owed to CMS by the RO participant) (d)	d = a + b + c	$ 5,100 + ($ 1,500) = $ 3,600