



# **Description of Radiation Oncology Model Episode File (2017 – 2019)**

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## Description of Radiation Oncology Model Episode File (2017-2019)

### Overview

This file is prepared in support of the Radiation Oncology (RO) Model. Its purpose is to provide RO participants and other interested stakeholders with detailed, de-identified information on episodes that are proposed to form the basis for calculating payment rates under the RO Model. The file contains data on baseline episodes that began during the period calendar year (CY) 2017 – 2019. Episodes are triggered by an initial treatment planning service and extend for 90 days. Two types of RT services are included under the Model: professional services, such as planning and management services, and technical services, such as radiation treatment delivery and related services. Each set of services (professional [PRO] and technical [TECH]) is attributed to a specific RT provider and RT supplier based on the initial treatment planning and RT services furnished at the beginning of an episode. A detailed description of the RO Model, episode definitions, and payment methodology is contained in Medicare Program; Specialty Care Models To Improve Quality of Care and Reduce Expenditures Final Rule (85 FR 61114; 42 CFR 512, subpart B) and proposed modifications to the exclusions policy in the CY 2022 Hospital Outpatient Prospective Payment System (OPPS) and Ambulatory Surgical Center (ASC) Payment System Notice of Proposed Rulemaking (NPRM) at CMS-1753-P;42 CFR 512 subpart B).

All payment amounts have been converted to 2019 Dollars. To calculate the national base rates for PRO and TECH of each included cancer type, episode counts and expenditures that initiated in 2017 would be weighted at 20 percent, episode counts and expenditures that initiated in 2018 would be weighted at 30 percent, and episode counts and expenditures that initiated in 2019 would be weighted at 50 percent. First, weight the episode expenditures by using the following data elements: RADONC\_PRO\_PAY, RADONC\_TECH\_PAY, CANCER\_TYPE, and YEAR; for all episodes for a specific included cancer type in a CY, multiply the RADONC\_PRO\_PAY variable by the number of episodes and the weight for that year, and then repeat for the RADONC\_TECH\_PAY variable. If there is no value listed in the cell of RADONC\_PRO\_PAY or RADONC\_TECH\_PAY for an episode, then the episode is not included in the calculation of the national base rate. Then, sum the weighted values of RADONC\_PRO\_PAY and RADONC\_TECH\_PAY for each included cancer type across the three years. Next, divide the summed and weighted PRO and TECH episode expenditures for each included cancer type by the sum of the weighted episode numbers for each included cancer type.

### File features

Unit of observation – Episode (90 days)

Content – Information related to both PRO and TECH components of each episode on one file

Time frame – Episodes beginning in CYs 2017– 2019

Scope – National

Exclusions – Episodes that do not qualify for the RO Model (e.g., certain cancer types; episodes in Maryland, Vermont, and U.S. Territories; episodes involving critical access hospital services); for a complete list of exclusions, please reference the Medicare Program; Specialty Care Models To Improve Quality of Care and Reduce Expenditures Final Rule (85 FR 61114; 42 CFR 512, subpart B) and proposed modifications to the exclusions policy in CY 2022 Hospital Outpatient Prospective Payment System (OPPS) and Ambulatory Surgical Center (ASC) Payment System NPRM (CMS-1753-P).

Format – Excel file

### Data Elements

Unless noted otherwise, the variables defined below will be present for all episodes and for purposes of this data dictionary, the term “provider” refers to physician group practices (including freestanding radiation therapy centers) and hospital outpatient departments.

<b>Data Element</b>	<b>Description</b>	<b>Length</b>	<b>Format</b>	<b>Example Values</b>
<u>EPISODE ID</u>	Each episode has been assigned a unique, random identification number.	6	CHAR	111111
<u>CANCER TYPE</u>	There are 15 proposed included cancer types in the episodes, each consisting of a specific bundle of ICD-9 and ICD-10 diagnosis codes. These proposed included cancer types are listed in the NPRM referenced above (CMS-1753-P). Diagnosis codes are obtained from claims data, as described in the NPRM. This variable is used to calculate the proposed national base rates and proposed case mix adjustments.	25	CHAR	<i>Bladder Cancer</i>
<u>AGE GROUP</u>	Beneficiary age at the start of the episode, determined from Medicare enrollment records. This variable is used to calculate the proposed case mix adjustments.	5	CHAR	< 65, 65–74, 75–84, 85+
<u>BENE SEX IDENT CD</u>	Beneficiary sex, determined from Medicare enrollment records. This variable is used to calculate the proposed case mix adjustments.	1	CHAR	1=male, 2=female
<u>TREATMENT SETTING</u>	Treatment setting refers to the setting in which the majority of radiation treatment delivery services were furnished during the episode (excluding radiation treatment delivery (guidance)). This is determined from claims for radiation treatment delivery services. This variable is used to identify episodes that are used in the calculation of the proposed national base rates and the proposed case mix adjustments.	12	CHAR	<i>Outpatient, Freestanding, Both</i>

<b>Data Element</b>	<b>Description</b>	<b>Length</b>	<b>Format</b>	<b>Example Values</b>
<u><i>RADONC_PRO_PROVIDER</i></u>	Each RT provider that has been attributed the professional component of at least one episode is assigned a unique, arbitrary provider ID. This variable allows episodes to be aggregated by attributed PRO provider for purposes of calculating the proposed case mix adjustments and the proposed historical experience adjustments. If an RT provider is attributed with both PRO and TECH components of episodes, the provider ID will be the same for this data element and the <i>RADONC_TECH_PROVIDER</i> data element.	5	CHAR	12345
<u><i>RADONC_TECH_PROVIDER</i></u>	Each RT provider that has been attributed the technical component of at least one episode is assigned a unique, arbitrary provider ID. This variable allows episodes to be aggregated by attributed TECH provider for purposes of calculating the proposed case mix adjustments and the proposed historical experience adjustments. If an RT provider is attributed with both PRO and TECH components of episodes, the provider ID will be the same for this data element and the <i>RADONC_PRO_PROVIDER</i> data element.	5	CHAR	12345
<u><i>RADONC_TECH_PROV_TYPE</i></u>	This indicates the type of RT provider (hospital outpatient department or freestanding radiation therapy center) that has been attributed the technical component of the episode. This variable is used to identify episodes that are used in the calculation of the proposed national base rates and the proposed case mix adjustments.	4	CHAR	OPD, FREE
<u><i>MAJOR_PROCEDURE_FLAG</i></u>	This indicates whether the beneficiary received a major procedure during the episode or in the previous 90 days. The procedure does not have to be related to cancer. A list of major procedures is contained in a separate file within this zip file containing the Radiation Oncology Model Episode File (2017-2019). This variable is used to calculate the proposed case mix adjustments.	1	NUM	1=Yes; 0=No

<b>Data Element</b>	<b>Description</b>	<b>Length</b>	<b>Format</b>	<b>Example Values</b>
<u>CHEMO_FLAG</u>	This indicates whether the beneficiary received chemotherapy during the episode or in the previous 90 days. A list of chemotherapy drugs is contained in a separate file within the zip file containing the Radiation Oncology Model EpisodeFile (2017-2019). This variable is used to calculate the proposed case mix adjustments.	1	NUM	1=Yes; 0=No
<u>DIED_1_30</u>	This indicates whether the beneficiary died during the first 30 days of the episode. This variable is used to calculate the proposed case mix adjustments.	1	NUM	1=Yes; 0=No
<u>DIED_31_60</u>	This indicates whether the beneficiary died during the second 30 days of the episode. This variable is used to calculate the proposed case mix adjustments.	1	NUM	1=Yes; 0=No
<u>DIED_61_90</u>	This indicates whether the beneficiary died during the last 30 days of the episode. This variable is used to calculate the proposed case mix adjustments.	1	NUM	1=Yes; 0=No
<u>RADONC_PRO_PAY</u>	This is the payment amount for professional services furnished in the episode in 2019 dollars. It is provided only for episodes used to calculate the proposed national base rates. This variable is used to calculate the proposed national base rates.	8	NUM	11111.11
<u>RADONC_TECH_PAY</u>	This is the payment amount for technical services furnished in the episode in 2019 dollars. It is provided only for episodes used to calculate the proposed national base rates. This variable is used to calculate the proposed national base rates.	8	NUM	11111.11

<b>Data Element</b>	<b>Description</b>	<b>Length</b>	<b>Format</b>	<b>Example Values</b>
<u>RADONC PRO PAY WINSO RIZED ALL</u>	This is the Winsorized payment amount for professional services furnished in the episode, in 2019 dollars. It is provided for all the proposed episodes, with Winsorization based on the 1 <sup>st</sup> and 99 <sup>th</sup> percentiles of the proposed episodes in the outpatient setting. This variable is used to calculate the proposed historical experience adjustments for all RO participants.	8	NUM	11111.11
<u>RADONC PRO PAY WINSO RIZED OPD</u>	This is the Winsorized payment amount for professional services furnished in the episode, in 2019 dollars. It is provided only for episodes proposed to generate the coefficients of the regression models, which are then, in turn, used to calculate the proposed case mix adjustments for all RO participants. Winsorization is based on the 1 <sup>st</sup> and 99 <sup>th</sup> percentiles of the proposed episodes in the outpatient setting. This variable is used to calculate the proposed case mix adjustments for all RO participants. These values may differ from RADONC_PRO_PAY_WINSORIZED_ALL due to differences in the way dollars are trended separately for OPD episodes.	8	NUM	11111.11
<u>RADONC TECH PAY WINSO RIZED ALL</u>	This is the Winsorized payment amount for technical services furnished during the episode, in 2019 dollars. It is provided for all proposed episodes, with Winsorization based on the 1 <sup>st</sup> and 99 <sup>th</sup> percentiles of the proposed episodes in the outpatient setting. This variable is used to calculate the proposed historical experience adjustments for all RO participants.	8	NUM	11111.11

<b>Data Element</b>	<b>Description</b>	<b>Length</b>	<b>Format</b>	<b>Example Values</b>
<u>RADONC TECH PAY WINSORIZED OPD</u>	This is the Winsorized payment amount for the technical component of RT services furnished in the episode, in 2019 dollars. It is provided only for episodes proposed to generate the coefficients of the regression models, which are then, in turn, used to calculate the proposed case mix adjustments for all RO participants. Winsorization is based on the 1 <sup>st</sup> and 99 <sup>th</sup> percentiles of the proposed episodes in the outpatient setting. This variable is used to calculate the proposed case mix adjustments for all RO participants. These values may differ from RADONC_TECH_PAY_WINSORIZED_ALL due to differences in the way dollars are trended separately for episodes in the outpatient setting.	8	NUM	11111.11
<u>COUNT_CEB</u>	This provides a count of the number of radiation treatment delivery services furnished during the episode for conventional external beam. This variable is provided for informational purposes.	14	CHAR	0 services, 1-10 services, 11-20 services, 21-30 services, 31-40 services, 41+ services
<u>COUNT_IMRT</u>	This provides a count of the number of radiation treatment delivery services furnished during the episode for IMRT. This variable is provided for informational purposes.	14	CHAR	0 services, 1-10 services, 11-20 services, 21-30 services, 31-40 services, 41+ services
<u>COUNT_PROTON</u>	This provides a count of the number of radiation treatment delivery services furnished during the episode for proton beam therapy. This variable is provided for informational purposes.	14	CHAR	0 services, 1-10 services, 11-20 services, 21-30 services, 31-40 services, 41+ services



<b>Data Element</b>	<b>Description</b>	<b>Length</b>	<b>Format</b>	<b>Example Values</b>
<u>COUNT_SRS</u>	This provides a count of the number of radiation treatment delivery services furnished during the episode for stereotactic radiosurgery. This variable is provided for informational purposes.	14	CHAR	<i>0 services, 1-10 services, 11-20 services, 21-30 services, 31-40 services, 41+ services</i>
<u>COUNT_SBRT</u>	This provides a count of the number of radiation treatment delivery services furnished during the episode for stereotactic body radiation therapy. This variable is provided for informational purposes.	14	CHAR	<i>0 services, 1-10 services, 11-20 services, 21-30 services, 31-40 services, 41+ services</i>
<u>YEAR</u>	This indicates the CY in which the episode began. This variable is used to adjust episode payment amounts that are initiated during the baseline period to 2019 dollars.	4	NUM	<i>2017, 2018, 2019</i>