National Program of Cancer Registries (NPCR) Data Quality Corner No. 2

Treatment Summary Surgery of Primary Site (NAACCR Data Item #1290) for Non-Malignant Brain Tumors

Overview

RX Summ—Surgical Procedure of Primary Site 03-2022 (NAACCR data item # 1290)1:

- Is required by NPCR, CoC, and SEER.
- Is applicable for diagnosis years 2003–2022.
- Records the surgical procedure(s) performed to the primary site during first-course treatment.
- Compares the efficacy of treatment options.
- Documents the most invasive surgical procedure for the primary site if only one procedure is collected in the registry software.
- Was replaced in 2023 by RX Summ Surg 2023 (NAACCR data item #1291) to capture code structure, not to the descriptions or definitions for brain/CNS sites.

Valid Codes (RX Summ—Surgery of Primary Site 03-2022 for diagnosis years 2003–2022)

No specimen sent to pathology	Specimen submitted to pathology	Unknown surgery
00 – No surgery 10 – Tumor destruction, NOS	 20 – Local excision of tumor, lesion, or mass; excisional biopsy 21 – Subtotal resection of tumor, lesion, or mass in brain 22 – Resection of tumor of spinal cord or nerve 30 – Radical, total, gross resection of tumor, lesion, or mass in brain 40 – Partial resection of lobe of brain when the surgery cannot be coded as 20-30 55 – Gross total resection of lobe of brain (lobectomy) 	90 – Surgery, NOS; type unknown 99 – Unknown if surgery performed, death certificate ONLY

Valid Codes (RX Summ – Surg 2023 for diagnosis years 2023+)

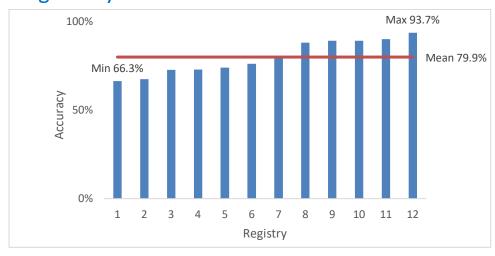
No specimen sent to pathology	Specimen submitted to pathology	Unknown surgery
A000 – No surgery	A200 – Local excision of tumor, lesion, or mass; excisional	A900 – Surgery, NOS
A100 – Tumor destruction,	biopsy	A990 – Unknown if surgery
NOS	A210 – Subtotal resection of tumor, lesion, or mass	performed, death certificate
	in brain	ONLY
	 A220 – Resection of tumor of spinal cord or nerve 	
	A300 – Radical, total, gross resection of tumor, lesion, or	
	mass in brain	
	A400 – Partial resection of lobe of brain when surgery can't	
	be coded as A200-A300	
	A550 – Gross total resection of lobe of brain (lobectomy)	



Problem

- RX Summ—Surgery of Primary Site 03-2022 for non-malignant brain tumors had one of the lowest accuracies among all data items validated for diagnosis years 2018–2020 as part of the NPCR Data Quality Evaluation.
- The overall accuracy for RX Summ—Surgery of Primary Site 03-2022 was 85.4% (779/912) for non-malignant brain tumors, ranging from 66.3% to 93.7% with a mean of 79.9% across 12 registries (Figure 1).
- Cases were miscoded as 21 or 30 when surgery was done but did not state a more specific procedure such as subtotal or gross resection of tumor.
- Failed to code cases as 21, 30, or 55 as applicable, when the specific procedure was documented in text fields.
- Did not code 00 when no surgery was recommended or performed, and when first course treatment was active surveillance or observation only.

Figure 1: Accuracy of RX Summ -- Surgery of Primary Site by registry, diagnosis years 2018–2020



Resources

- Per STORE manual 2018, Appendix B: Site-Specific Surgery Codes, Brain, page 484
 - Review the surgical information in the medical record to determine the type of surgery that was performed.
 - Use code 20 if no description of the procedure is available to classify the surgery.
 - o Use code 21 when only a subtotal resection was performed or described.
 - Use code 30 when total or gross resection of the tumor was performed.
 - Use code 40 when the surgery cannot be coded as 20 or 30 or is described as a partial resection of a lobe of the brain.
- Per SEER Manual 2018, page 161, and SEER Appendix C: Site-Specific Coding
 - Use code 20 for a local excision of tumor, lesion, or mass and includes excisional biopsy.
 - For SEER registries, assign code 20 for stereotactic biopsy of brain tumor.
 - Use code 21 for a subtotal resection of tumor, lesion, or mass in brain.
 - Use code 30 for a radical, total, gross resection of tumor, lesion, or mass in brain.

¹Version 24 - Data Item #1290: RX SUMM--Surg Prim Site 03-2022. https://apps.naaccr.org/data-dictionary/data-dictionary/data-dictionary/data-dictionary/data-dictionary/version=24/data-item-view/item-number=1290/. Accessed October 3, 2024.