



By:

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Assistance

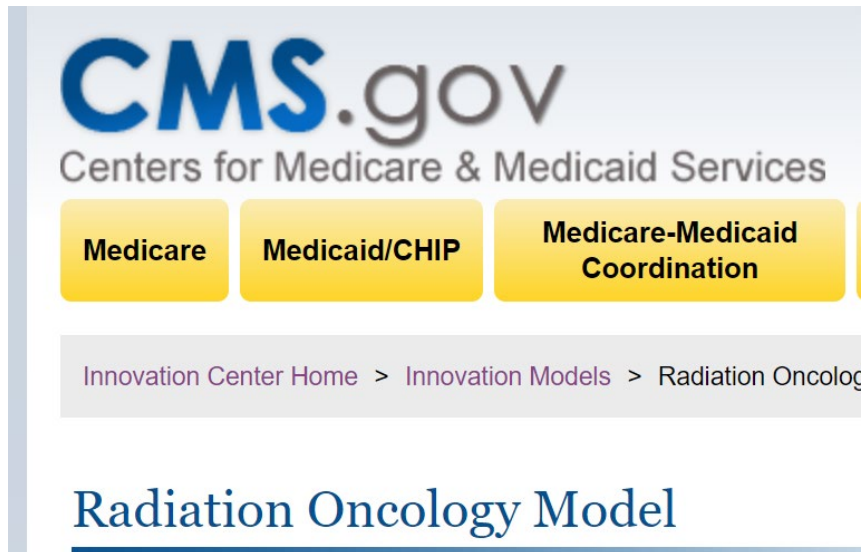
- For assistance with the RO APM or any other service/solution/ or question:
- Email me directly – jordani@oncospark.com
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Fast Fact and Predictions

- Comment Period Ends this week- 9/17
- COVID as a delay
- CDE Burden
- Access to care
 - Center distribution
 - System network
 - Rural Vs Urban
 - Cost of Operation
 - CON Laws
 - Referring physicians
- Halo influences
 - Service line dollar allocation and offset
 - Price transparency
 - Staffing
 - Complexity of cases





- ◆ Breast CDE Template (XLS)
- ◆ Lung CDE Template (XLS)
- ◆ Prostate CDE Template (XLS)
- ◆ RO Episode File (2017-2019) (XLS)
- ◆ HCPCS_CD Chemotherapy Codes File - July 2021 (CSV)
- ◆ NDC Chemotherapy Codes File - July 2021 (CSV)
- ◆ Major Procedures File - July 2021(CSV)
- ◆ Case Mix Regression Model - July 2021 (XLS)
- ◆ Data Dictionary - July 2021 (PDF)





High Level – Outpatient Service

Outpatient						Total	Percent of Total	Percent of All Modalities
CEB	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	20,963	15,816	12,298	6,012	44	55,133	34.23%	46.24%
2018	20,970	17,069	11,254	4,454	43	53,790	33.40%	
2019	20,341	17,979	10,455	3,319	34	52,128	32.37%	
						161,051		
Outpatient						Total	Percent of Total	Percent of All Modalities
IMRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	3,604	4,668	13,860	10,340	5,306	37,778	31.114%	34.86%
2018	3,896	5,213	15,448	10,519	5,144	40,220	33.126%	
2019	4,614	5,829	17,776	10,581	4,619	43,419	35.760%	
						121,417		
Outpatient						Total	Percent of Total	Percent of All Modalities
Proton	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	93	126	338	168	281	1,006	30.61%	0.94%
2018	103	151	371	212	224	1,061	32.28%	
2019	134	213	428	325	120	1,220	37.12%	
						3,287		
Outpatient						Total	Percent of Total	Percent of All Modalities
SRS	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	4,987	-	-	-	-	4,987	33.68%	4.25%
2018	4,893	2	-	-	-	4,895	33.05%	
2019	4,927	-	-	-	-	4,927	33.27%	
						14,809		
Outpatient						Total	Percent of Total	Percent of All Modalities
SBRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	14,148	27	-	-	-	14,175	29.71%	13.70%
2018	15,695	16	-	-	-	15,711	32.93%	
2019	17,798	28	-	-	-	17,826	37.36%	

High Level – Outpatient Financials

Outpatient Tech Pay						Total	Percent of Total
CEB	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 122,950,877	\$ 124,237,183	\$ 134,349,358	\$ 77,814,278	\$ 812,028	\$ 460,163,725	
2018	\$ 123,140,920	\$ 139,431,457	\$ 125,980,883	\$ 59,327,936	\$ 790,010	\$ 448,671,206	
2019	\$ 120,871,755	\$ 148,920,860	\$ 118,142,795	\$ 45,239,148	\$ 612,357	\$ 433,786,916	
						1,342,621,847	30.16%
Outpatient Tech Pay						Total	
IMRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 29,982,414	\$ 57,195,510	\$ 246,112,929	\$ 228,512,895	\$ 139,962,657	\$ 701,766,405	
2018	\$ 32,146,664	\$ 63,495,305	\$ 275,984,782	\$ 234,953,183	\$ 137,522,138	\$ 744,102,073	
2019	\$ 37,270,920	\$ 71,312,292	\$ 314,854,848	\$ 234,863,590	\$ 123,128,206	\$ 781,429,857	
						2,227,298,334	50.03%
Outpatient Tech Pay						Total	Percent of Modalities
Proton	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 1,120,831	\$ 2,956,833	\$ 10,181,998	\$ 6,270,651	\$ 14,150,477	\$ 34,680,790	
2018	\$ 1,191,609	\$ 3,456,411	\$ 11,445,614	\$ 8,058,792	\$ 11,301,703	\$ 35,454,129	
2019	\$ 1,368,692	\$ 5,104,956	\$ 13,309,911	\$ 14,049,091	\$ 5,997,654	\$ 39,830,305	
						\$ 109,965,223	2.47%
Outpatient Tech Pay						Total	
SRS	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 60,274,392	\$ -	\$ -	\$ -	\$ -	\$ 60,274,392	
2018	\$ 59,391,054	\$ 49,895	\$ -	\$ -	\$ -	\$ 59,440,949	
2019	\$ 59,937,144	\$ -	\$ -	\$ -	\$ -	\$ 59,937,144	
						\$ 179,652,485	4.04%
Outpatient Tech Pay						Total	
SBRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 178,360,846	\$ 788,574	\$ -	\$ -	\$ -	\$ 179,149,420	
2018	\$ 192,951,615	\$ 458,805	\$ -	\$ -	\$ -	\$ 193,410,420	
2019	\$ 218,846,444	\$ 725,703	\$ -	\$ -	\$ -	\$ 219,572,146	
						\$ 592,131,986	13.30%



High Level – Freestanding Services

Freestanding						Total	Percent of Total	Percent of All Modalities
CEB	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	8,873	7,388	5,191	3,300	87	24,839	35.80%	39.16%
2018	8,318	7,534	4,619	2,497	58	23,026	33.18%	
2019	8,094	7,508	4,020	1,858	45	21,525	31.02%	
						69,390		
Freestanding						Total	Percent of Total	Percent of All Modalities
IMRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	2,121	2,754	7,843	7,341	7,810	27,869	32.84%	47.89%
2018	2,211	2,788	8,244	7,422	7,411	28,076	33.08%	
2019	2,462	3,224	9,100	7,293	6,839	28,918	34.08%	
						84,863		
Freestanding						Total	Percent of Total	Percent of All Modalities
Proton	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	113	148	441	533	381	1,616	34.07%	2.68%
2018	119	138	489	441	379	1,566	33.02%	
2019	100	159	491	462	349	1,561	32.91%	
						4,743		
Freestanding						Total	Percent of Total	Percent of All Modalities
SRS	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	1,888	3	-	-	-	1,891	31.42%	3.40%
2018	1,968	3	-	-	-	1,971	32.75%	
2019	2,148	8	-	-	-	2,156	35.83%	
						6,018		
Freestanding						Total	Percent of Total	Percent of All Modalities
SBRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services			
2017	3,625	8	-	-	-	3,633	29.84%	6.87%
2018	4,012	13	-	-	-	4,025	33.06%	
2019	4,505	11	1	-	-	4,517	37.10%	

High Level – Freestanding Financials

Outpatient Pro Pay						Total	Percent of Total
CEB	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 29,018,377	\$ 28,395,875	\$ 30,113,978	\$ 16,738,228	\$ 160,391	\$ 104,426,849	
2018	\$ 28,981,144	\$ 31,021,723	\$ 27,693,857	\$ 12,621,272	\$ 151,830	\$ 100,469,825	
2019	\$ 28,665,482	\$ 32,737,204	\$ 26,040,838	\$ 9,677,756	\$ 116,291	\$ 97,237,572	
						\$ 302,134,246	36.46%
Outpatient Pro Pay						Total	
IMRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 7,157,489	\$ 11,479,011	\$ 43,773,295	\$ 38,785,121	\$ 22,987,432	\$ 124,182,348	
2018	\$ 7,636,957	\$ 12,703,360	\$ 49,354,051	\$ 40,127,570	\$ 22,669,907	\$ 132,491,844	
2019	\$ 8,919,093	\$ 14,371,006	\$ 57,344,985	\$ 40,922,064	\$ 20,723,691	\$ 142,280,840	
						\$ 398,955,032.14	48.14%
Outpatient Pro Pay						Total	Percent of Modalities
Proton	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 165,332	\$ 311,039	\$ 954,791	\$ 555,105	\$ 1,138,263	\$ 3,124,530	
2018	\$ 178,689	\$ 372,635	\$ 1,073,172	\$ 717,990	\$ 892,637	\$ 3,235,123	
2019	\$ 211,333	\$ 522,870	\$ 1,229,061	\$ 1,167,328	\$ 519,917	\$ 3,650,510	
						\$ 10,010,163	1.21%
Outpatient Pro Pay						Total	
SRS	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 8,690,682	\$ -	\$ -	\$ -	\$ -	\$ 8,690,682	
2018	\$ 8,594,704	\$ 6,977	\$ -	\$ -	\$ -	\$ 8,601,681	
2019	\$ 8,580,486	\$ -	\$ -	\$ -	\$ -	\$ 8,580,486	
						\$ 25,872,849	3.12%
Outpatient Pro Pay						Total	
SBRT	1-10 services	11-20 services	21-30 services	31-40 services	41+ services		
2017	\$ 27,278,562.46	\$ 119,225.18	\$ -	\$ -	\$ -	\$ 27,397,788	
2018	\$ 30,047,423.74	\$ 68,273.51	\$ -	\$ -	\$ -	\$ 30,115,697	
2019	\$ 34,105,662.74	\$ 119,473.93	\$ -	\$ -	\$ -	\$ 34,225,137	
						\$ 91,738,622	11.07%

Summary

2017

CANCER_TYPE	BOTH	FREESTANDING	OUTPATIENT	Total
Anal Cancer	1	572	1082	1655
Bladder Cancer	1	842	1587	2430
Bone Metastases	21	6557	9926	16504
Brain Metastases	38	3017	7714	10769
Breast Cancer	8	11638	24061	35707
Cervical Cancer	1	263	643	907
CNS Tumor	2	864	2406	3272
Colorectal Cancer	1	1564	3456	5021
Head and Neck Cancer	1	3158	6535	9694
Lung Cancer	59	9447	23399	32905
Lymphoma		1763	3944	5707
Pancreatic Cancer	1	635	1735	2371
Prostate Cancer	21	14335	16018	30374
Upper GI Cancer	2	1529	3245	4776
Uterine Cancer		870	2132	3002
Total	157	57054	107883	165094

2018

CANCER_TYPE	BOTH	FREESTANDING	OUTPATIENT	Total
Anal Cancer		576	1165	1741
Bladder Cancer		894	1619	2513
Bone Metastases	21	5971	10108	16100
Brain Metastases	31	2720	7681	10432
Breast Cancer	3	11573	24970	36546
Cervical Cancer		246	617	863
CNS Tumor	1	803	2473	3277
Colorectal Cancer	1	1535	3512	5048
Head and Neck Cancer		3118	6750	9868
Lung Cancer	57	9292	23620	32969
Lymphoma		1690	3988	5678
Pancreatic Cancer	2	668	1729	2399
Prostate Cancer	21	14616	17162	31799
Upper GI Cancer	1	1507	3191	4699
Uterine Cancer	1	848	2189	3038
Total	139	56057	110774	166970

2019

CANCER_TYPE	BOTH	FREESTANDING	OUTPATIENT	Total
Anal Cancer		580	1211	1791
Bladder Cancer		846	1740	2586
Bone Metastases	12	5756	10043	15811
Brain Metastases	14	2510	7627	10151
Breast Cancer	1	11584	26036	37621
Cervical Cancer		251	602	853
CNS Tumor		858	2441	3299
Colorectal Cancer		1504	3464	4968
Head and Neck Cancer		3080	6666	9746
Lung Cancer	20	9313	24349	33682
Lymphoma		1710	3827	5537
Pancreatic Cancer		675	1782	2457
Prostate Cancer	5	15061	19176	34242
Upper GI Cancer		1460	3327	4787
Uterine Cancer		844	2272	3116
Total	52	56032	114563	170647

Freestanding (-1.79%)

OPPS (6.19%)

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Service Data By Disease Site, Modality, and Year

2017 Service Data by Disease Site- IMRT

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	63	139	1042	202	5
Bladder Cancer	183	220	336	635	17
Bone Metastases	798	485	116	46	12
Brain Metastases	412	202	81	47	
Breast Cancer	573	806	1667	493	14
Cervical Cancer	49	66	395	68	
CNS Tumor	282	591	1409	242	2
Colorectal Cancer	232	227	1571	144	19
Head and Neck Cancer	440	523	2282	4380	88
Lung Cancer	1641	1666	4539	3261	58
Lymphoma	238	1138	350	19	7
Pancreatic Cancer	121	149	1040	47	4
Prostate Cancer	330	738	3007	7775	12894
Upper GI Cancer	269	361	2348	183	9
Uterine Cancer	101	112	1522	140	2
Total	5732	7423	21705	17682	13131

2018 Service Data by Disease Site IMRT

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	71	129	1138	187	2
Bladder Cancer	169	272	389	710	16
Bone Metastases	875	453	151	39	22
Brain Metastases	427	188	83	38	2
Breast Cancer	635	852	1508	358	8
Cervical Cancer	53	67	378	67	5
CNS Tumor	302	637	1402	244	4
Colorectal Cancer	279	233	1678	140	17
Head and Neck Cancer	505	510	2396	4423	103
Lung Cancer	1728	1787	4873	3231	49
Lymphoma	244	1302	284	30	13
Pancreatic Cancer	132	147	1057	36	3
Prostate Cancer	348	885	4127	8111	12297
Upper GI Cancer	218	411	2537	177	11
Uterine Cancer	125	128	1692	150	5
Total	6111	8001	23693	17941	12557

2019 Service Data by Disease Site IMRT

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	64	127	1229	194	2
Bladder Cancer	200	348	399	722	12
Bone Metastases	1065	489	143	37	13
Brain Metastases	563	220	81	36	3
Breast Cancer	719	977	1593	345	5
Cervical Cancer	49	68	424	61	5
CNS Tumor	306	680	1386	231	1
Colorectal Cancer	318	222	1721	127	10
Head and Neck Cancer	541	555	2490	4286	109
Lung Cancer	2023	1948	5338	3094	36
Lymphoma	255	1336	364	25	12
Pancreatic Cancer	133	188	1052	36	2
Prostate Cancer	411	1377	6246	8370	11231
Upper GI Cancer	283	393	2590	184	12
Uterine Cancer	151	125	1821	126	5
Total	7081	9053	26877	17874	11458

2017 Service Data by Disease Site CEB

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	78	5	5	1	
Bladder Cancer	55	27	91	9	1
Bone Metastases	281	65	8	3	1
Brain Metastases	104	35	6	2	1
Breast Cancer	1377	139	136	45	3
Cervical Cancer	41	5	28	1	
CNS Tumor	44	6	9		
Colorectal Cancer	133	10	47	1	
Head and Neck Cancer	180	18	17	8	1
Lung Cancer	625	161	95	21	1
Lymphoma	93	54	6		
Pancreatic Cancer	25	6	5		
Prostate Cancer	404	31	202	2	
Upper GI Cancer	98	28	17		
Uterine Cancer	78	13	30		
Total	3616	603	702	93	8

2018 Service Data by Disease Site CEB

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	75	9	2		
Bladder Cancer	56	20	70	4	1
Bone Metastases	303	57	9	1	
Brain Metastases	102	36	3		2
Breast Cancer	1223	141	122	29	
Cervical Cancer	38	6	18		
CNS Tumor	54	7	7	1	
Colorectal Cancer	131	11	68		
Head and Neck Cancer	167	22	14	8	
Lung Cancer	511	155	65	14	
Lymphoma	87	53	5	1	
Pancreatic Cancer	20	3	5		
Prostate Cancer	323	19	177	4	2
Upper GI Cancer	99	19	6		
Uterine Cancer	73	19	30		
Total	3262	577	601	62	5

2019 Service Data by Disease Site CEB

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	62	6	3		
Bladder Cancer	43	23	64	4	
Bone Metastases	325	65	3	1	
Brain Metastases	111	35	4	1	
Breast Cancer	1215	153	106	21	
Cervical Cancer	40	7	18		
CNS Tumor	36	6	5		
Colorectal Cancer	98	17	54		
Head and Neck Cancer	147	19	27	5	
Lung Cancer	539	91	55	6	
Lymphoma	79	41	9	1	
Pancreatic Cancer	36	2	2		
Prostate Cancer	413	26	187	2	2
Upper GI Cancer	87	12	8		
Uterine Cancer	53	4	32		
Total	3284	507	577	41	2

Service Data by Disease Site SBRT

2017

CANCER_TYPE	1-10 services	11-20 services
Anal Cancer	2	
Bladder Cancer	4	
Bone Metastases	58	
Brain Metastases	65	
Breast Cancer	7	
Cervical Cancer	3	
CNS Tumor	3	
Colorectal Cancer	6	
Head and Neck Cancer	31	
Lung Cancer	278	1
Lymphoma	4	
Pancreatic Cancer	9	
Prostate Cancer	123	2
Upper GI Cancer	9	
Uterine Cancer	10	
Total	612	3

2018

CANCER_TYPE	1-10 services	11-20 services
Anal Cancer	4	
Bladder Cancer	7	
Bone Metastases	59	
Brain Metastases	79	
Breast Cancer	17	
Cervical Cancer	7	
CNS Tumor	2	
Colorectal Cancer	13	
Head and Neck Cancer	36	1
Lung Cancer	268	
Lymphoma	6	
Pancreatic Cancer	10	
Prostate Cancer	132	
Upper GI Cancer	16	
Uterine Cancer	7	
Total	663	1

2019

CANCER_TYPE	1-10 services	11-20 services
Anal Cancer	2	
Bladder Cancer	7	
Bone Metastases	91	1
Brain Metastases	107	
Breast Cancer	16	
Cervical Cancer	5	
CNS Tumor	9	
Colorectal Cancer	28	
Head and Neck Cancer	42	
Lung Cancer	311	
Lymphoma	5	
Pancreatic Cancer	7	
Prostate Cancer	175	
Upper GI Cancer	18	
Uterine Cancer	15	
Total	838	1

36.93% increase

2017 Service Data by Disease Site Proton

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer			2		
Bladder Cancer		2	1		
Breast Cancer				2	
CNS Tumor		3	5		
Colorectal Cancer	2		1		
Head and Neck Cancer	6	14	16	9	
Lung Cancer	1	5	10	15	
Pancreatic Cancer	3	1		1	
Prostate Cancer	2	36	1	4	8
Upper GI Cancer	3	3	5		
Uterine Cancer	1				
Total	18	64	41	31	8

2018 Service Data by Disease Site Proton

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	1	1			
Bladder Cancer		2		1	
Bone Metastases	1				
Breast Cancer			2	1	
CNS Tumor		4	2		
Head and Neck Cancer	4	12	23	15	2
Lung Cancer	3	4	4	4	
Lymphoma		2			
Pancreatic Cancer		3	2		
Prostate Cancer	2	25	14	24	6
Upper GI Cancer		2	2		
Total	11	55	49	45	8

2019 Service Data by Disease Site Proton

CANCER_TYPE	1-10 services	11-20 services	21-30 services	31-40 services	41+ services
Anal Cancer	2				
Bone Metastases	1				
Brain Metastases		2	1		
Breast Cancer	2	1			
CNS Tumor	2	4	2	1	
Colorectal Cancer	1	1			
Head and Neck Cancer	8	13	26	7	
Lung Cancer	4	9	13	4	
Pancreatic Cancer		1	2		
Prostate Cancer	1	31	9	4	3
Upper GI Cancer		4	5		
Uterine Cancer			2		
Total	21	66	60	16	3

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**PRO and TECH Pay by
disease site based on
value \$**

SBRT- 2017 (left) - 2019

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Lung Cancer	\$122,104,192.41
+ Prostate Cancer	\$26,687,819.15
+ Brain Metastases	\$24,149,648.35
+ Bone Metastases	\$14,959,725.98
+ Pancreatic Cancer	\$6,778,783.20
+ Breast Cancer	\$3,366,807.27
+ Colorectal Cancer	\$3,223,694.85
+ Head and Neck Cancer	\$3,160,675.07
+ CNS Tumor	\$2,059,106.98
+ Uterine Cancer	\$1,080,416.74
+ Upper GI Cancer	\$1,040,529.26
+ Bladder Cancer	\$905,945.26
+ Lymphoma	\$801,319.29
+ Cervical Cancer	\$198,822.95
+ Anal Cancer	\$128,456.98
Total	\$210,645,943.74

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Lung Cancer	\$124,687,284.46
+ Prostate Cancer	\$30,876,284.15
+ Brain Metastases	\$26,956,715.62
+ Bone Metastases	\$16,964,253.02
+ Pancreatic Cancer	\$7,511,341.05
+ Breast Cancer	\$4,693,863.00
+ Head and Neck Cancer	\$3,844,445.49
+ Colorectal Cancer	\$3,425,734.66
+ CNS Tumor	\$2,391,214.54
+ Upper GI Cancer	\$1,285,871.09
+ Bladder Cancer	\$1,134,604.74
+ Uterine Cancer	\$1,014,331.19
+ Lymphoma	\$757,896.94
+ Anal Cancer	\$333,591.95
+ Cervical Cancer	\$310,765.53
Total	\$226,188,197.43

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Lung Cancer	\$135,882,837.30
+ Prostate Cancer	\$38,333,591.93
+ Brain Metastases	\$29,133,259.29
+ Bone Metastases	\$19,410,986.55
+ Pancreatic Cancer	\$9,259,111.71
+ Breast Cancer	\$5,645,587.34
+ Colorectal Cancer	\$4,513,870.43
+ Head and Neck Cancer	\$4,027,163.78
+ CNS Tumor	\$2,794,470.19
+ Upper GI Cancer	\$1,741,453.41
+ Uterine Cancer	\$1,481,228.22
+ Lymphoma	\$1,012,224.52
+ Bladder Cancer	\$950,051.05
+ Cervical Cancer	\$379,689.64
+ Anal Cancer	\$196,718.59
Total	\$254,762,243.95

CEB- 2017 (left) - 2019

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY	CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY	CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Breast Cancer	\$280,112,441.92	+ Breast Cancer	\$281,986,456.28	+ Breast Cancer	\$284,846,868.20
+ Lung Cancer	\$83,170,296.79	+ Lung Cancer	\$72,993,193.23	+ Lung Cancer	\$62,467,647.11
+ Bone Metastases	\$55,512,509.79	+ Bone Metastases	\$55,869,298.63	+ Bone Metastases	\$53,965,664.13
+ Colorectal Cancer	\$24,518,266.23	+ Colorectal Cancer	\$23,874,849.16	+ Prostate Cancer	\$21,474,192.25
+ Brain Metastases	\$23,633,444.48	+ Brain Metastases	\$22,160,687.34	+ Colorectal Cancer	\$21,436,050.20
+ Prostate Cancer	\$22,544,948.01	+ Lymphoma	\$21,517,310.86	+ Lymphoma	\$19,511,535.99
+ Lymphoma	\$21,885,723.00	+ Prostate Cancer	\$20,403,900.25	+ Brain Metastases	\$19,026,752.44
+ Head and Neck Cancer	\$14,985,492.10	+ Head and Neck Cancer	\$14,572,478.14	+ Head and Neck Cancer	\$12,271,145.04
+ Upper GI Cancer	\$12,641,640.23	+ Upper GI Cancer	\$10,157,000.80	+ Upper GI Cancer	\$9,691,434.16
+ Uterine Cancer	\$10,369,380.43	+ Bladder Cancer	\$9,077,045.84	+ Bladder Cancer	\$8,528,571.02
+ Bladder Cancer	\$10,281,899.39	+ Uterine Cancer	\$8,388,021.77	+ Uterine Cancer	\$7,542,802.53
+ Cervical Cancer	\$3,980,985.07	+ Cervical Cancer	\$3,375,362.86	+ Pancreatic Cancer	\$2,978,151.81
+ Pancreatic Cancer	\$3,919,774.53	+ Pancreatic Cancer	\$3,067,190.72	+ Cervical Cancer	\$2,962,077.04
+ CNS Tumor	\$3,112,634.51	+ CNS Tumor	\$2,772,621.82	+ Anal Cancer	\$2,003,501.97
+ Anal Cancer	\$2,694,879.86	+ Anal Cancer	\$2,611,493.00	+ CNS Tumor	\$1,915,672.62
Total	\$573,364,316.34	Total	\$552,826,910.70	Total	\$530,622,066.51

IMRT- 2017 (left) - 2019

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY	CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY	CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
⊕ Prostate Cancer	\$337,735,537.90	⊕ Prostate Cancer	\$354,158,959.68	⊕ Prostate Cancer	\$375,610,717.99
⊕ Lung Cancer	\$142,120,313.48	⊕ Lung Cancer	\$149,407,314.15	⊕ Lung Cancer	\$159,450,402.38
⊕ Head and Neck Cancer	\$117,659,281.60	⊕ Head and Neck Cancer	\$121,961,554.84	⊕ Head and Neck Cancer	\$119,709,385.91
⊕ Upper GI Cancer	\$38,157,999.70	⊕ Upper GI Cancer	\$41,710,534.99	⊕ Upper GI Cancer	\$48,950,704.21
⊕ CNS Tumor	\$33,734,338.56	⊕ CNS Tumor	\$35,064,766.78	⊕ CNS Tumor	\$34,110,197.74
⊕ Breast Cancer	\$29,094,536.45	⊕ Uterine Cancer	\$29,225,584.21	⊕ Breast Cancer	\$30,371,779.38
⊕ Uterine Cancer	\$25,054,717.83	⊕ Breast Cancer	\$28,371,150.48	⊕ Uterine Cancer	\$30,300,822.17
⊕ Colorectal Cancer	\$24,345,085.25	⊕ Colorectal Cancer	\$27,384,173.64	⊕ Colorectal Cancer	\$27,182,781.09
⊕ Anal Cancer	\$19,563,053.97	⊕ Anal Cancer	\$20,866,309.97	⊕ Anal Cancer	\$22,235,204.20
⊕ Pancreatic Cancer	\$17,361,169.17	⊕ Bladder Cancer	\$18,782,020.90	⊕ Bladder Cancer	\$20,948,776.77
⊕ Bladder Cancer	\$17,191,190.48	⊕ Lymphoma	\$17,878,330.26	⊕ Lymphoma	\$17,660,766.79
⊕ Lymphoma	\$16,045,017.32	⊕ Pancreatic Cancer	\$16,582,573.69	⊕ Pancreatic Cancer	\$17,126,640.89
⊕ Bone Metastases	\$8,234,550.32	⊕ Bone Metastases	\$8,941,545.68	⊕ Bone Metastases	\$10,510,086.39
⊕ Cervical Cancer	\$7,598,794.02	⊕ Cervical Cancer	\$7,426,683.55	⊕ Brain Metastases	\$8,363,536.31
⊕ Brain Metastases	\$6,145,686.36	⊕ Brain Metastases	\$6,424,481.98	⊕ Cervical Cancer	\$7,867,131.44
Total	\$840,041,272.41	Total	\$884,185,984.80	Total	\$930,398,933.66

Proton- 2017 (left) - 2019

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY	CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY	CANCER TYPE	PRO PAY PLUS TECH PAY
⊕ Prostate Cancer	\$23,160,400.02	⊕ Prostate Cancer	\$22,248,874.19	⊕ Prostate Cancer	\$25,163,796.56
⊕ Lung Cancer	\$4,624,168.83	⊕ Head and Neck Cancer	\$6,006,767.96	⊕ Head and Neck Cancer	\$5,459,936.62
⊕ Head and Neck Cancer	\$3,922,209.15	⊕ Lung Cancer	\$4,622,947.46	⊕ Lung Cancer	\$4,703,207.90
⊕ Breast Cancer	\$2,085,620.97	⊕ Breast Cancer	\$2,483,725.50	⊕ Breast Cancer	\$2,893,143.69
⊕ Upper GI Cancer	\$2,084,252.91	⊕ Upper GI Cancer	\$2,046,590.17	⊕ CNS Tumor	\$2,446,636.38
⊕ CNS Tumor	\$1,851,583.44	⊕ CNS Tumor	\$1,869,246.51	⊕ Upper GI Cancer	\$2,166,495.30
⊕ Pancreatic Cancer	\$706,012.52	⊕ Pancreatic Cancer	\$514,803.23	⊕ Anal Cancer	\$802,936.11
⊕ Anal Cancer	\$671,810.06	⊕ Anal Cancer	\$490,721.45	⊕ Uterine Cancer	\$672,538.28
⊕ Colorectal Cancer	\$549,732.52	⊕ Uterine Cancer	\$412,621.83	⊕ Pancreatic Cancer	\$500,947.66
⊕ Lymphoma	\$467,442.03	⊕ Lymphoma	\$300,234.79	⊕ Colorectal Cancer	\$411,483.60
⊕ Uterine Cancer	\$425,865.63	⊕ Colorectal Cancer	\$252,803.37	⊕ Lymphoma	\$366,858.24
⊕ Brain Metastases	\$104,918.62	⊕ Brain Metastases	\$190,164.33	⊕ Bone Metastases	\$290,582.46
⊕ Bone Metastases	\$68,139.12	⊕ Bone Metastases	\$66,163.04	⊕ Brain Metastases	\$287,576.13
Total	\$40,722,155.82	⊕ Bladder Cancer	\$28,391.44	⊕ Bladder Cancer	\$98,158.94
		Total	\$41,534,055.27	Total	\$46,264,297.87

SRS- 2017 (left) - 2019

~75%



CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
⊕ Brain Metastases	\$49,822,048.76
⊕ Lung Cancer	\$10,814,095.31
⊕ Bone Metastases	\$2,870,358.15
⊕ CNS Tumor	\$2,566,608.75
⊕ Breast Cancer	\$1,972,211.62
⊕ Colorectal Cancer	\$486,313.08
⊕ Head and Neck Cancer	\$463,716.78
⊕ Prostate Cancer	\$459,818.16
⊕ Upper GI Cancer	\$315,065.65
⊕ Bladder Cancer	\$292,256.41
⊕ Lymphoma	\$281,974.62
⊕ Uterine Cancer	\$147,807.13
⊕ Cervical Cancer	\$30,570.67
⊕ Anal Cancer	\$24,386.80
⊕ Pancreatic Cancer	\$13,784.30
Total	\$70,561,016.19

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
⊕ Brain Metastases	\$48,416,516.10
⊕ Lung Cancer	\$11,177,503.90
⊕ Bone Metastases	\$2,931,621.88
⊕ CNS Tumor	\$2,094,699.13
⊕ Breast Cancer	\$1,857,841.65
⊕ Prostate Cancer	\$456,462.25
⊕ Colorectal Cancer	\$410,781.32
⊕ Upper GI Cancer	\$316,296.62
⊕ Head and Neck Cancer	\$291,352.42
⊕ Lymphoma	\$259,828.86
⊕ Uterine Cancer	\$259,692.47
⊕ Bladder Cancer	\$130,110.29
⊕ Pancreatic Cancer	\$105,910.54
⊕ Cervical Cancer	\$50,272.07
Total	\$68,758,889.50

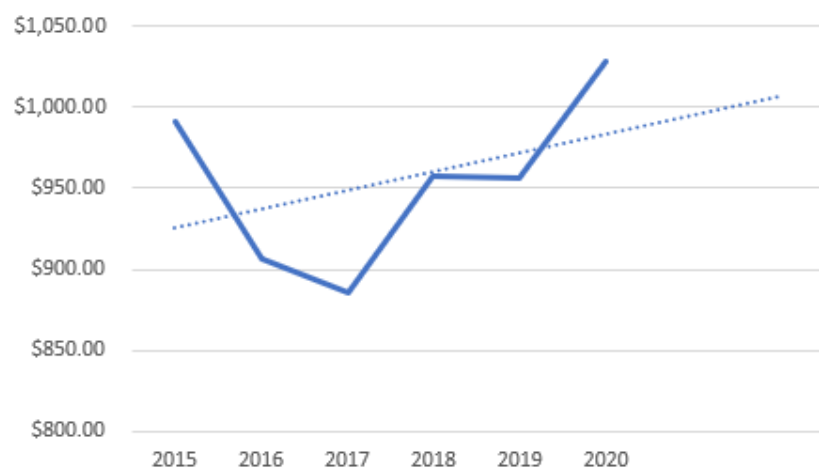
CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
⊕ Brain Metastases	\$48,629,335.76
⊕ Lung Cancer	\$10,555,688.55
⊕ Bone Metastases	\$3,091,829.29
⊕ CNS Tumor	\$2,048,666.59
⊕ Breast Cancer	\$1,944,883.28
⊕ Colorectal Cancer	\$534,743.73
⊕ Prostate Cancer	\$504,818.59
⊕ Head and Neck Cancer	\$355,863.70
⊕ Upper GI Cancer	\$223,470.12
⊕ Bladder Cancer	\$219,349.17
⊕ Lymphoma	\$169,884.14
⊕ Uterine Cancer	\$167,803.88
⊕ Pancreatic Cancer	\$84,855.49
⊕ Anal Cancer	\$67,833.80
⊕ Cervical Cancer	\$37,985.86
Total	\$68,637,011.95

3

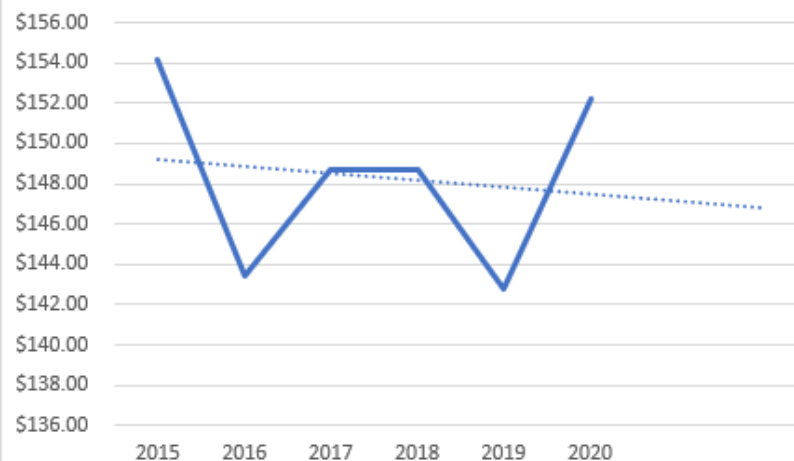
**Payments by Location, by
Year, and Includes all
cancer types**

Keep in Mind the Overall Trends During This time Period

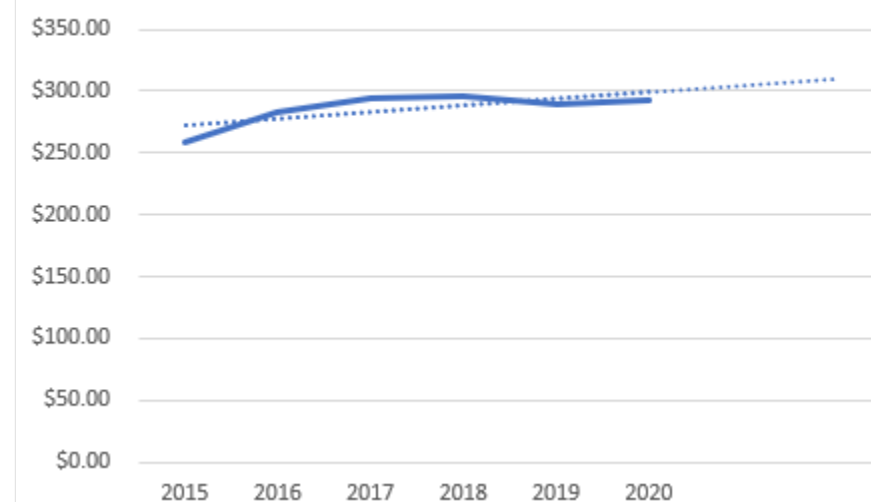
OPPS Rates



average professional reimburse



Technical amounts



IMRT Freestanding Payments All Cancer Types 2017 (top) - 2019

	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services			33,465.16			188,051.66
11-20 services			136,149.21			1,090,876.43
21-30 services			18,060.88			148,780.13
31-40 services			16,387.29			145,869.27
41+ services			25,335.33			255,586.40
Total			229,397.87			1,829,163.89
	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services			6,735.72			46,125.08
11-20 services			100,011.55			811,116.85
21-30 services			53,296.88			533,262.38
31-40 services		-48.77%	67,340.14		-53.92%	803,426.28
41+ services			19,659.23			203,607.38
Total			247,043.52			2,397,537.97
	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services			11,945.85			56,484.98
11-20 services			58,539.74			487,821.66
21-30 services			30,397.47			283,317.57
31-40 services			18,724.46			178,560.58
41+ services			6,963.48			98,544.83
Total			126,571.00			1,104,729.62

IMRT HOPD Payments All Cancer Types 2017 (top) - 2019

COUNT_IMRT	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSO ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services	225,795.26	225,795.26	223,073.82	2,663,744.87	2,331,846.29	2,314,257.43
11-20 services	60,885.49	60,885.49	60,151.64	534,440.00	534,050.74	525,062.28
21-30 services	48,822.76	48,626.33	52,559.44	408,728.79	393,657.20	408,661.01
31-40 services	4,849.57	4,849.57	4,791.12	30,343.34	30,343.34	29,810.91
Total	340,353.08	340,156.65	340,576.02	3,637,257.00	3,289,897.57	3,277,791.63

COUNT_IMRT	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSO ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services	230,758.19	230,758.19	229,011.15	2,544,437.56	2,336,975.76	2,327,617.94
11-20 services	48,165.87	48,165.87	47,801.23	488,019.26	436,525.19	434,788.34
21-30 services	43,091.44	43,091.44	42,765.20	363,621.57	346,924.46	344,542.30
Total	322,015.50	322,015.50	319,577.58	3,396,078.39	3,120,425.41	3,106,948.58

29.75%

25.88%

COUNT_IMRT	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSO ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services	225,877.39	225,877.39	225,877.39	2,525,128.01	2,384,637.19	2,384,637.19
11-20 services	129,774.89	129,366.75	129,366.75	1,141,183.20	1,097,857.86	1,097,857.86
21-30 services	59,009.64	59,009.64	59,009.64	426,641.88	422,595.94	422,595.94
31-40 services	3,548.77	3,548.77	3,548.77	23,157.95	23,157.95	23,157.95
Total	418,210.69	417,802.55	417,802.55	4,116,111.04	3,928,248.94	3,928,248.94

Proton Freestanding Payments All Cancer Types 2017 (top) - 2019

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services			185,131.75			1,348,439.65
11-20 services			371,897.57			3,367,050.06
21-30 services			1,271,028.17			13,762,138.48
31-40 services			1,745,408.71			21,350,357.70
41+ services			1,349,889.48			17,518,465.80
Total			4,923,355.68			57,346,451.69

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services			181,697.97			1,315,055.34
11-20 services			332,392.52			3,025,719.75
21-30 services			1,350,884.37			15,219,036.26
31-40 services		-6.97%	1,437,209.51		-2.70%	17,291,637.95
41+ services			1,370,874.28			18,301,974.68
Total			4,673,058.65			55,153,423.98

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services			153,231.10			1,105,272.86
11-20 services			353,244.12			3,457,326.93
21-30 services			1,318,273.34			15,735,232.97
31-40 services			1,497,721.35			18,456,727.98
41+ services			1,258,204.69			17,046,242.23
Total			4,580,674.60			55,800,802.97

Proton HOPD Payments All Cancer Types 2017 (top) - 2019

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services	162,098.38	162,763.42	165,331.76	1,123,461.27	1,118,754.74	1,120,830.72
11-20 services	315,229.20	314,784.00	311,038.53	3,080,058.82	3,003,347.00	2,956,833.35
21-30 services	966,571.83	966,375.40	954,791.42	11,113,758.60	10,297,630.28	10,181,998.10
31-40 services	563,057.92	561,766.04	555,104.79	7,296,855.75	6,321,391.97	6,270,650.63
41+ services	1,152,243.78	1,152,100.70	1,138,263.34	14,948,820.27	14,208,758.71	14,150,477.11
Total	3,159,201.11	3,157,789.56	3,124,529.84	37,562,954.71	34,949,882.70	34,680,789.91
Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services	179,814.17	180,047.30	178,688.89	1,200,593.93	1,200,639.97	1,191,609.25
11-20 services	375,818.18	375,446.85	372,634.90	3,539,259.89	3,479,832.31	3,456,410.66
21-30 services	1,083,148.12	1,081,278.47	1,073,172.29	12,436,747.98	11,498,779.89	11,445,614.41
31-40 services	724,582.30	723,349.11	717,989.75	9,063,225.44	8,091,222.68	8,058,791.52
41+ services	899,524.96	899,403.37	892,637.45	12,031,340.30	11,320,645.67	11,301,702.76
Total	3,262,887.73	3,259,525.10	3,235,123.28	38,271,167.54	35,591,120.52	35,454,128.60
Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services	210,612.85	211,333.33	211,333.48	1,372,474.71	1,368,691.93	1,368,691.93
11-20 services	522,869.82	522,869.82	522,869.82	5,166,730.18	5,104,956.41	5,104,956.41
21-30 services	1,229,483.21	1,229,061.37	1,229,061.37	14,538,409.67	13,309,911.17	13,309,911.17
31-40 services	1,170,295.36	1,167,328.39	1,167,328.39	15,057,798.33	14,049,091.10	14,049,091.10
41+ services	522,009.87	519,916.77	519,916.77	6,473,613.87	5,997,654.06	5,997,654.06
Total	3,655,271.11	3,650,509.83	3,650,509.83	42,609,026.76	39,830,304.67	39,830,304.67

15.6%

14.85%

SBRT Freestanding Payments All Cancer Types 2017 (top) - 2019

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services Total			3,432.72 3,432.72			35,958.50 35,958.50
<div> <div>270%</div> <div>113%</div> </div>						
Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services Total			6,547.95 6,547.95			43,760.05 43,760.05
Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO RIZED_ALL	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO RIZED_ALL
1-10 services Total			12,699.31 12,699.31			76,621.26 76,621.26

Proton HOPD Payments All Cancer Types 2017 (top) - 2019

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO
1-10 services	14,339.35	13,894.15	13,775.33	131,575.31	90,266.29	89,585.19
Total	14,339.35	13,894.15	13,775.33	131,575.31	90,266.29	89,585.19

207%

Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO
1-10 services	45,789.86	43,557.37	43,350.87	397,837.58	325,271.81	324,225.65
Total	45,789.86	43,557.37	43,350.87	397,837.58	325,271.81	324,225.65

302%

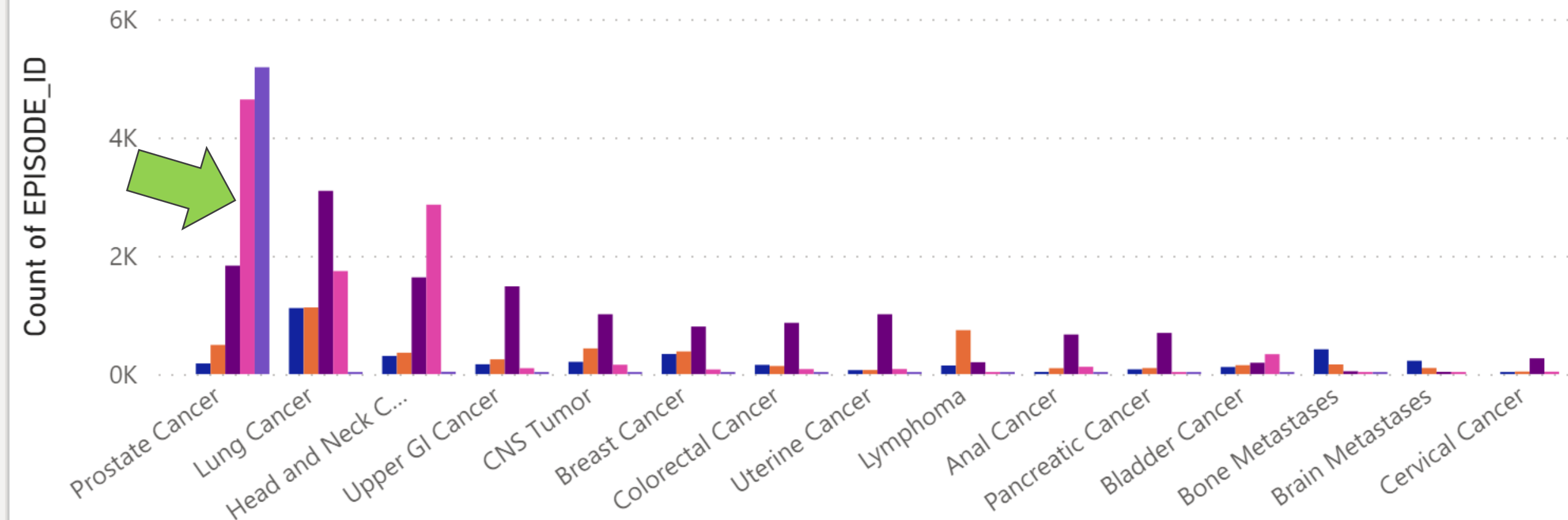
Value	RADONC_PRO_PAY	RADONC_PRO_PAY_WIN SORIZED_OPD	RADONC_PRO_PAY_WINSO	RADONC_TECH_PAY	RADONC_TECH_PAY_WINSORIZ ED_OPD	RADONC_TECH_PAY_WINSO
1-10 services	45,988.76	42,788.81	42,788.81	434,268.47	359,725.87	359,725.87
Total	45,988.76	42,788.81	42,788.81	434,268.47	359,725.87	359,725.87

4

**Counts by disease site, by
year, modality, and
number of episodes**

IMRT 2017

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



IMRT 2018

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services

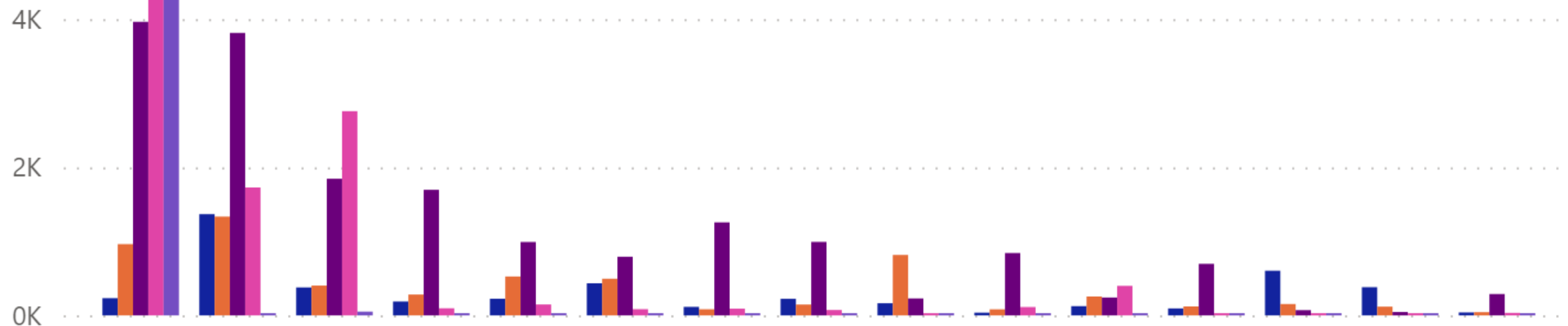
Count of EPISODE_ID

Prostate Cancer
Lung Cancer
Head and Neck C...
Upper GI Cancer
CNS Tumor
Breast Cancer
Uterine Cancer
Colorectal Cancer
Lymphoma
Anal Cancer
Bladder Cancer
Pancreatic Cancer
Bone Metastases
Brain Metastases
Cervical Cancer

IMRT 2019

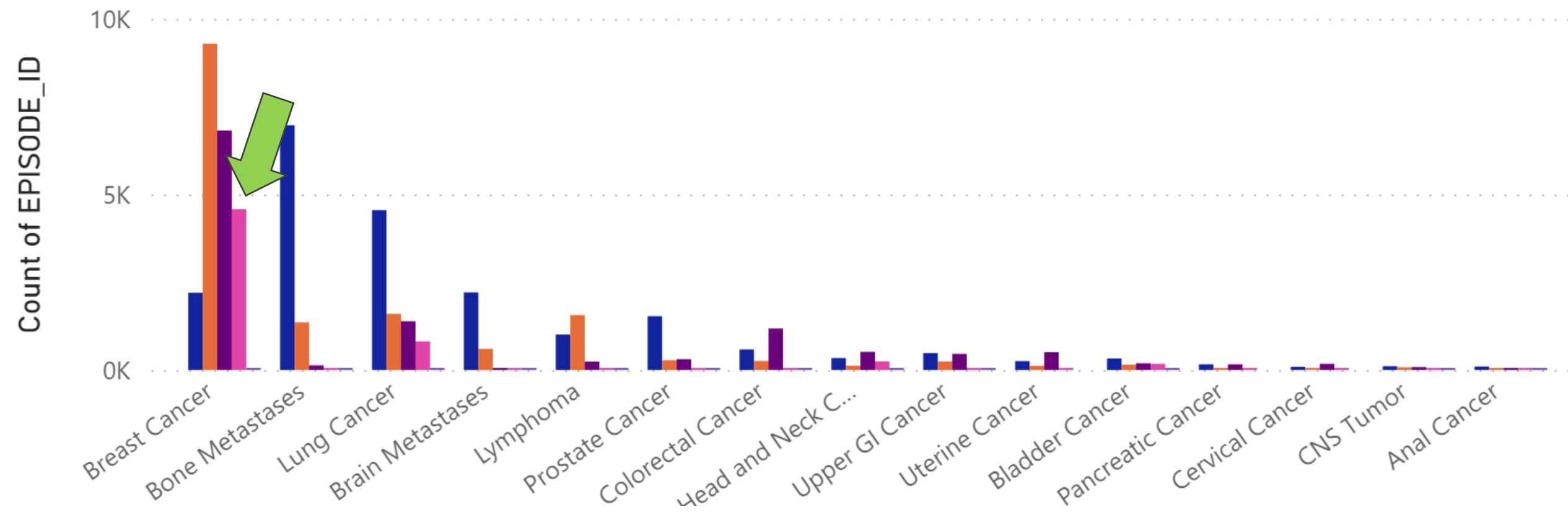
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services

Count of EPISODE_ID



CEB 2017

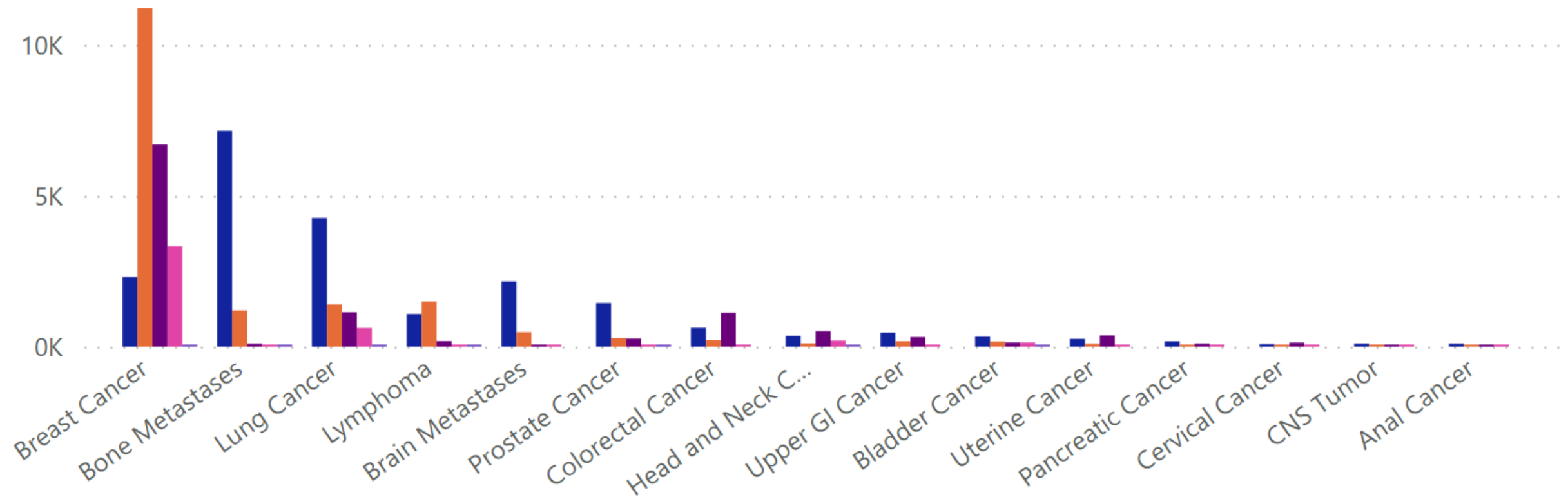
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



CEB 2018

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services

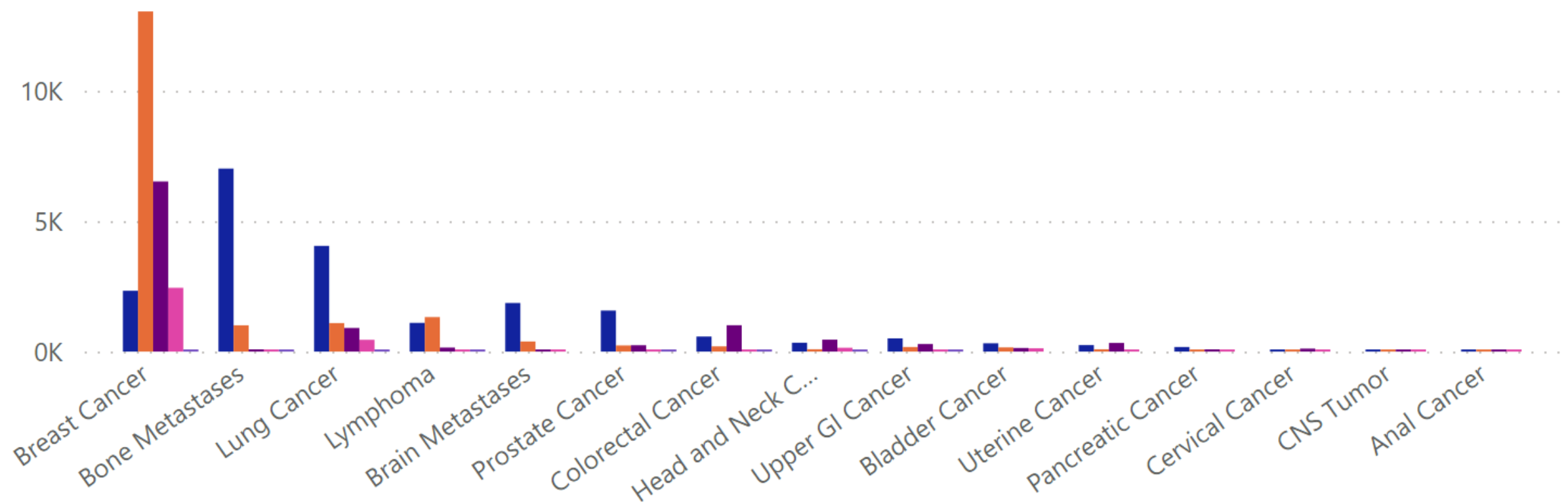
Count of EPISODE_ID



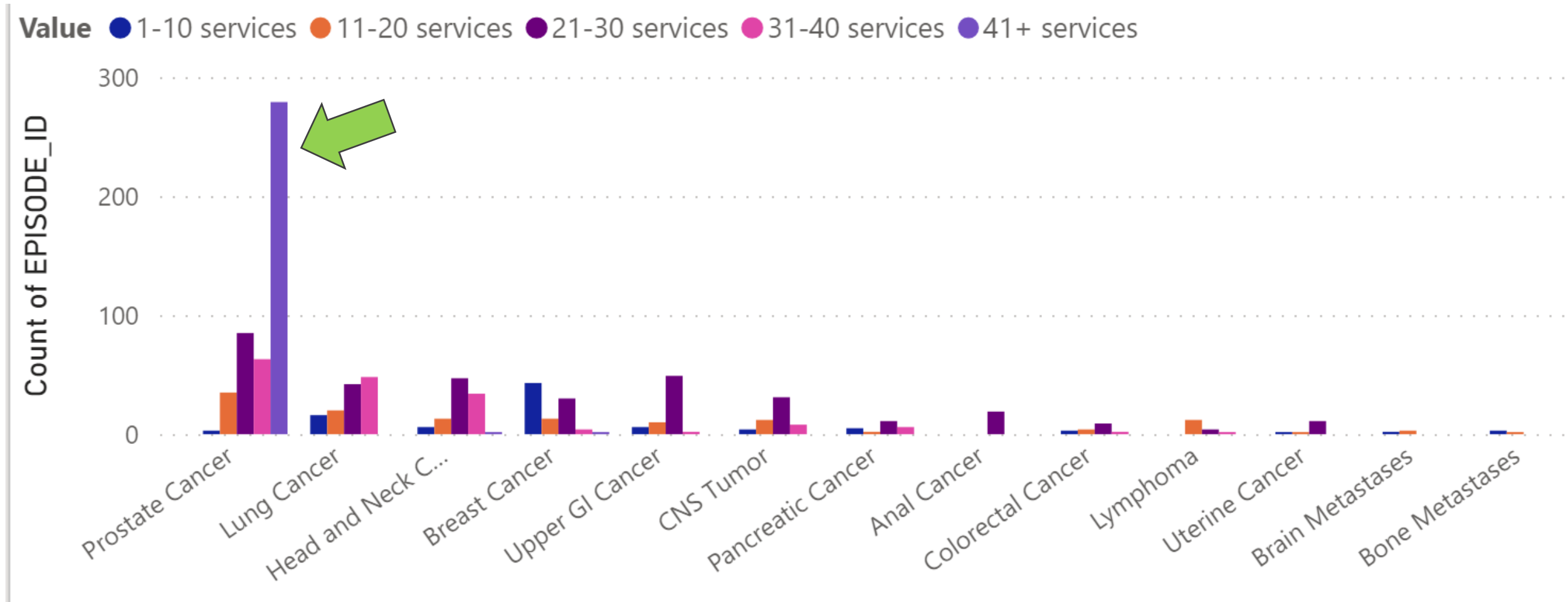
CEB 2019

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services

Count of EPISODE_ID

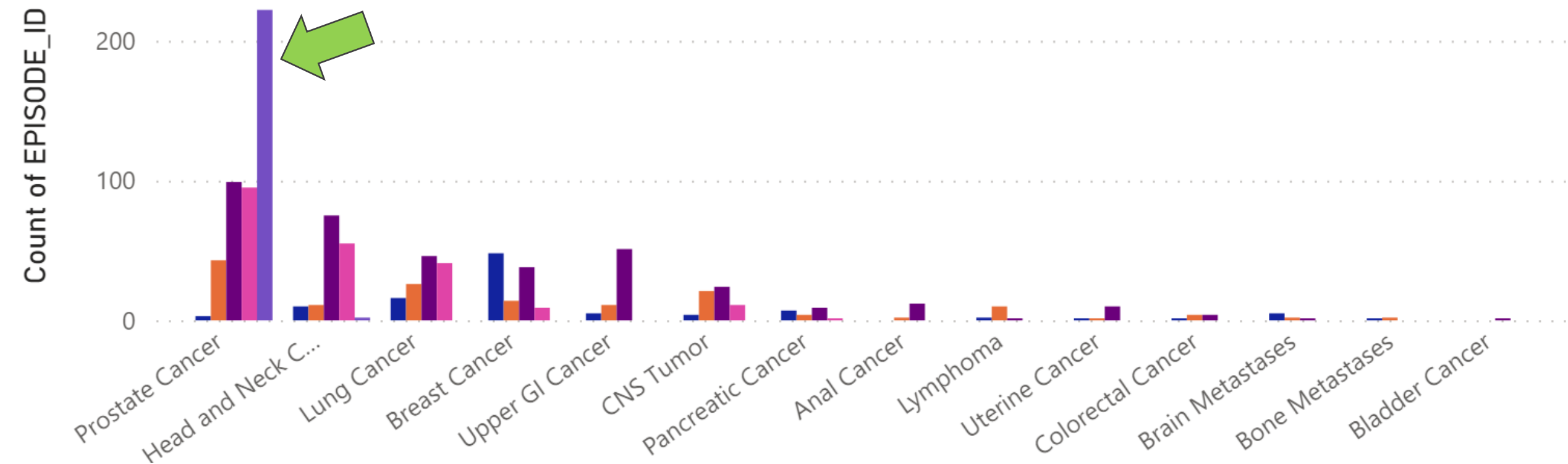


Proton 2017



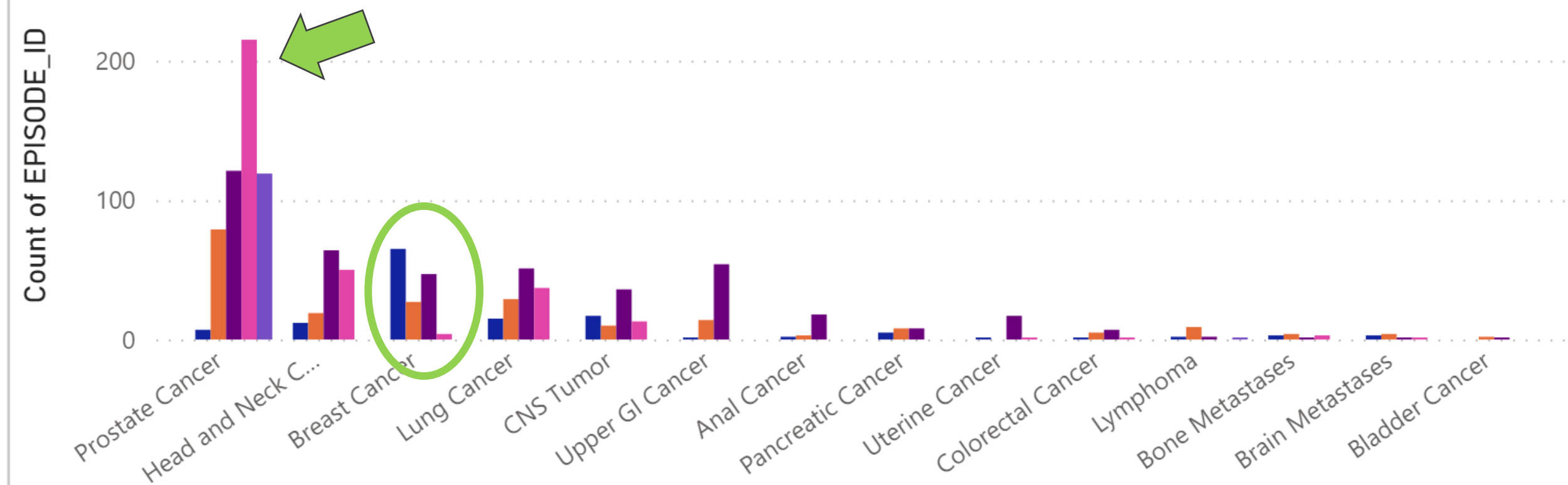
Proton 2018

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



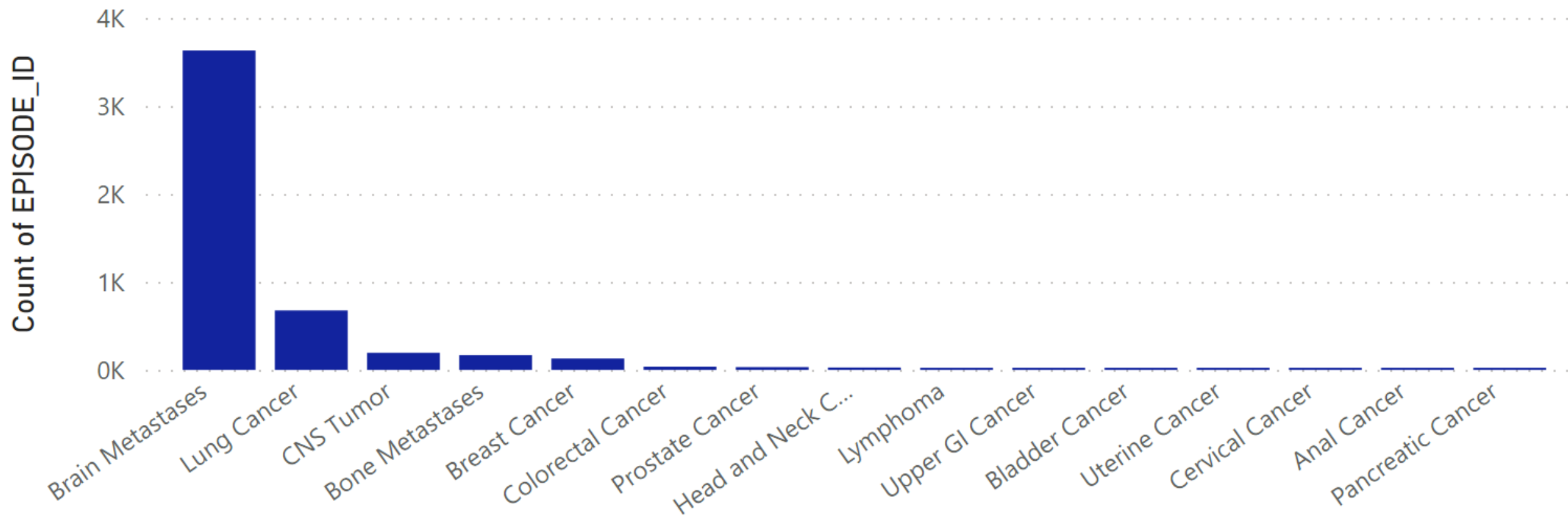
Proton 2019

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



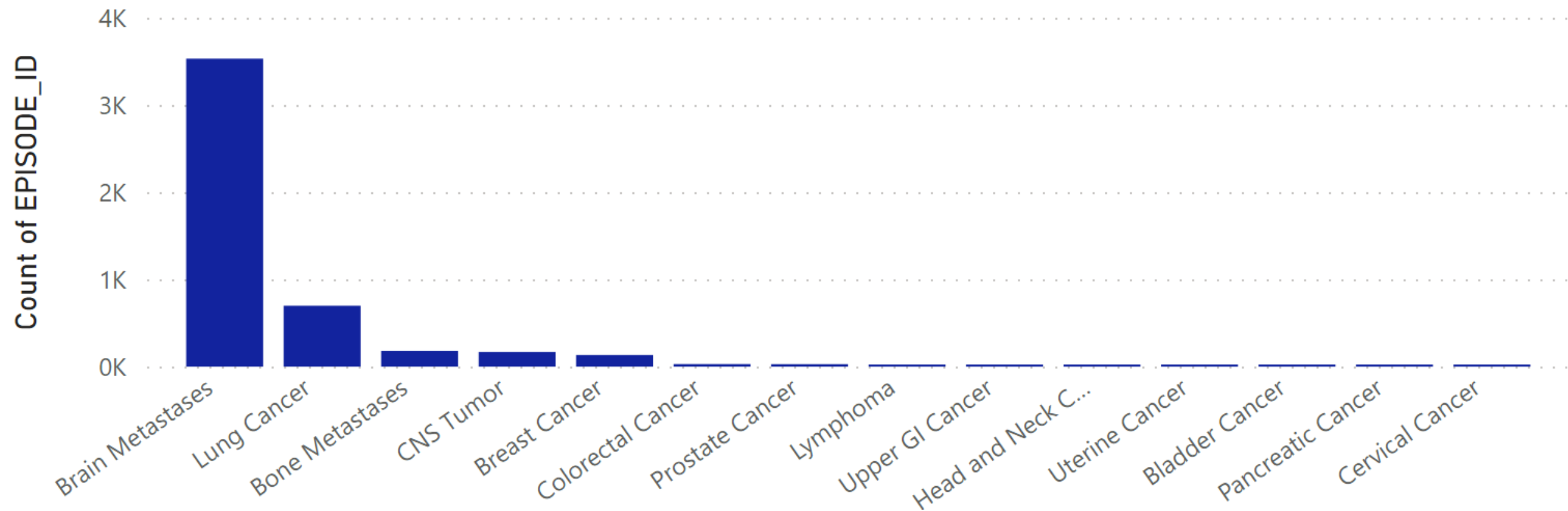
SRS 2017

Value ● 1-10 services

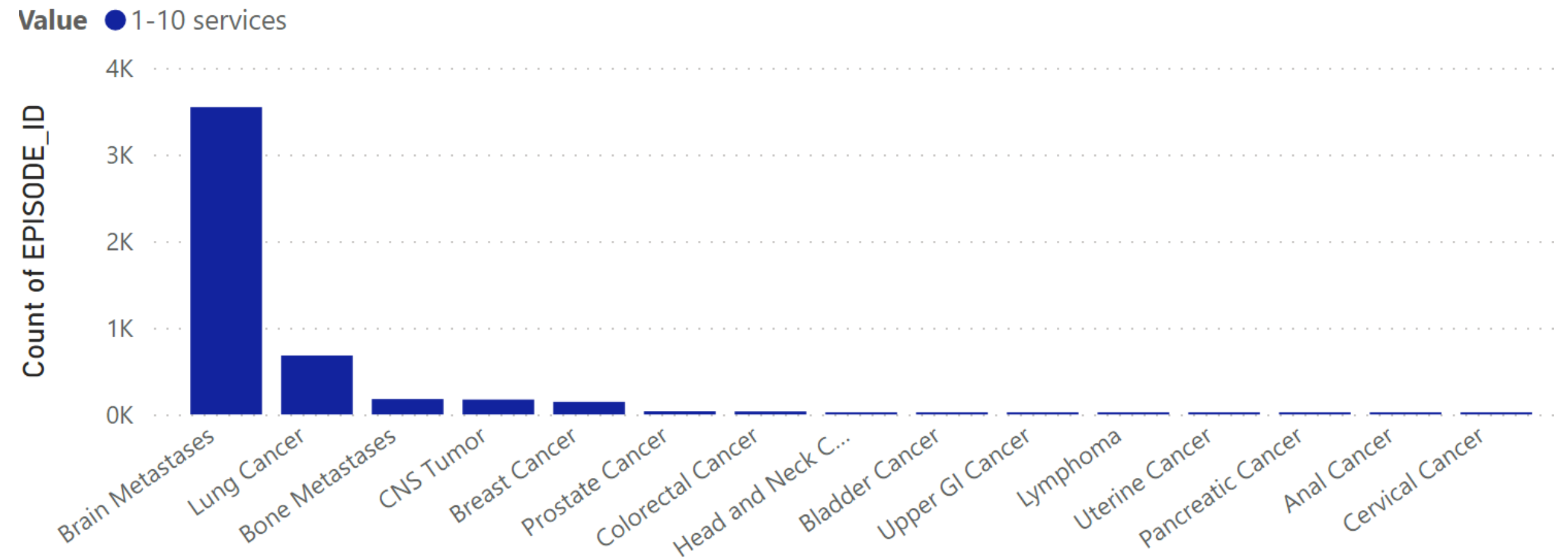


SRS 2018

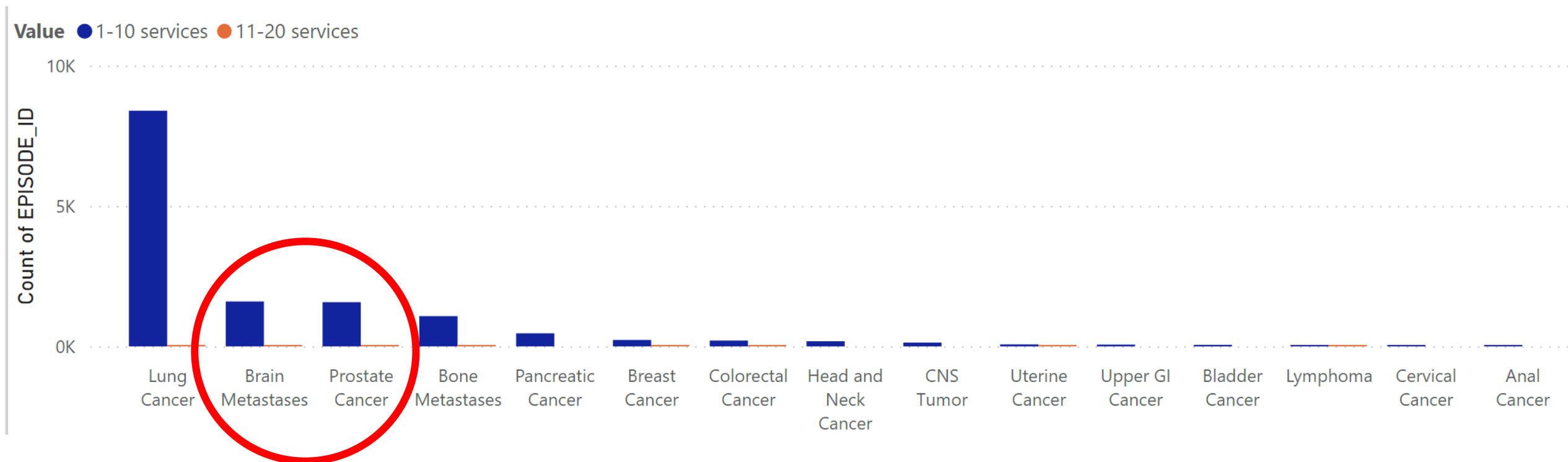
Value ● 1-10 services



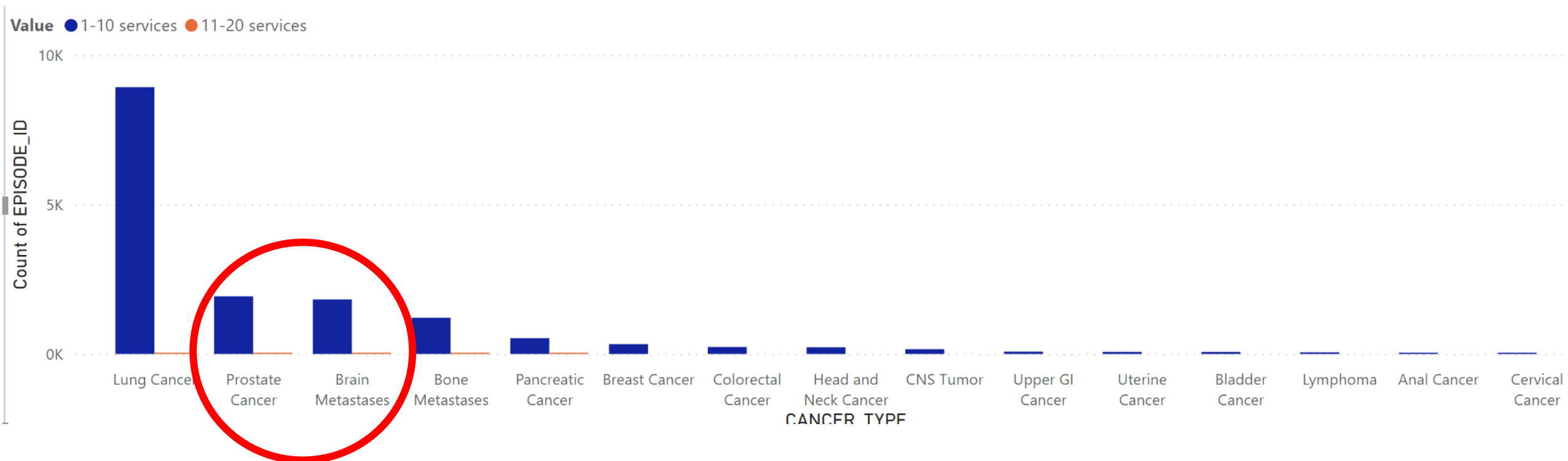
SRS 2019



SBRT 2017

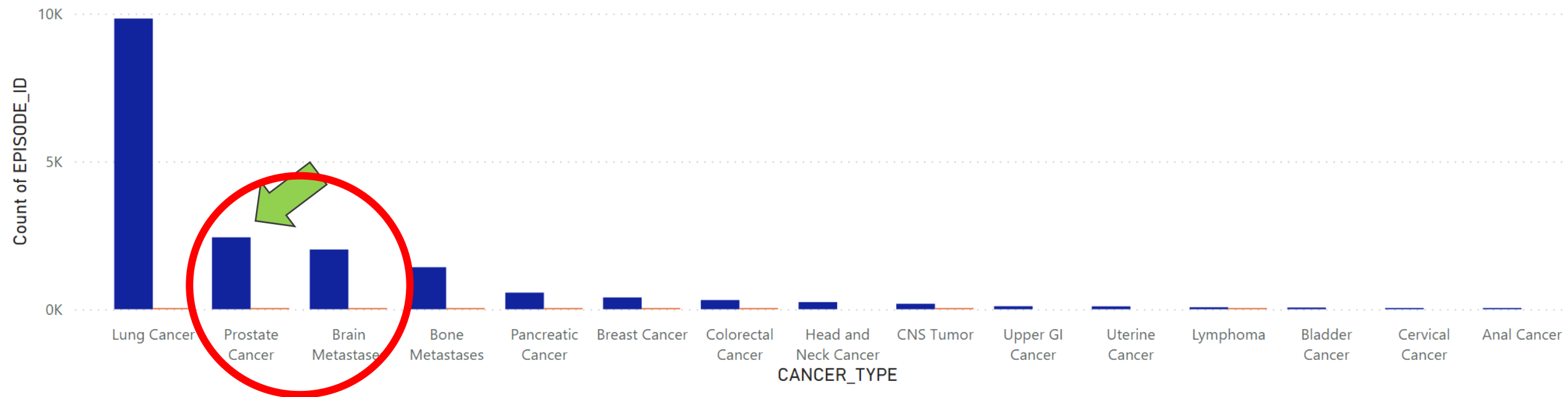


SBRT 2018



SBRT 2019

Value ● 1-10 services ● 11-20 services



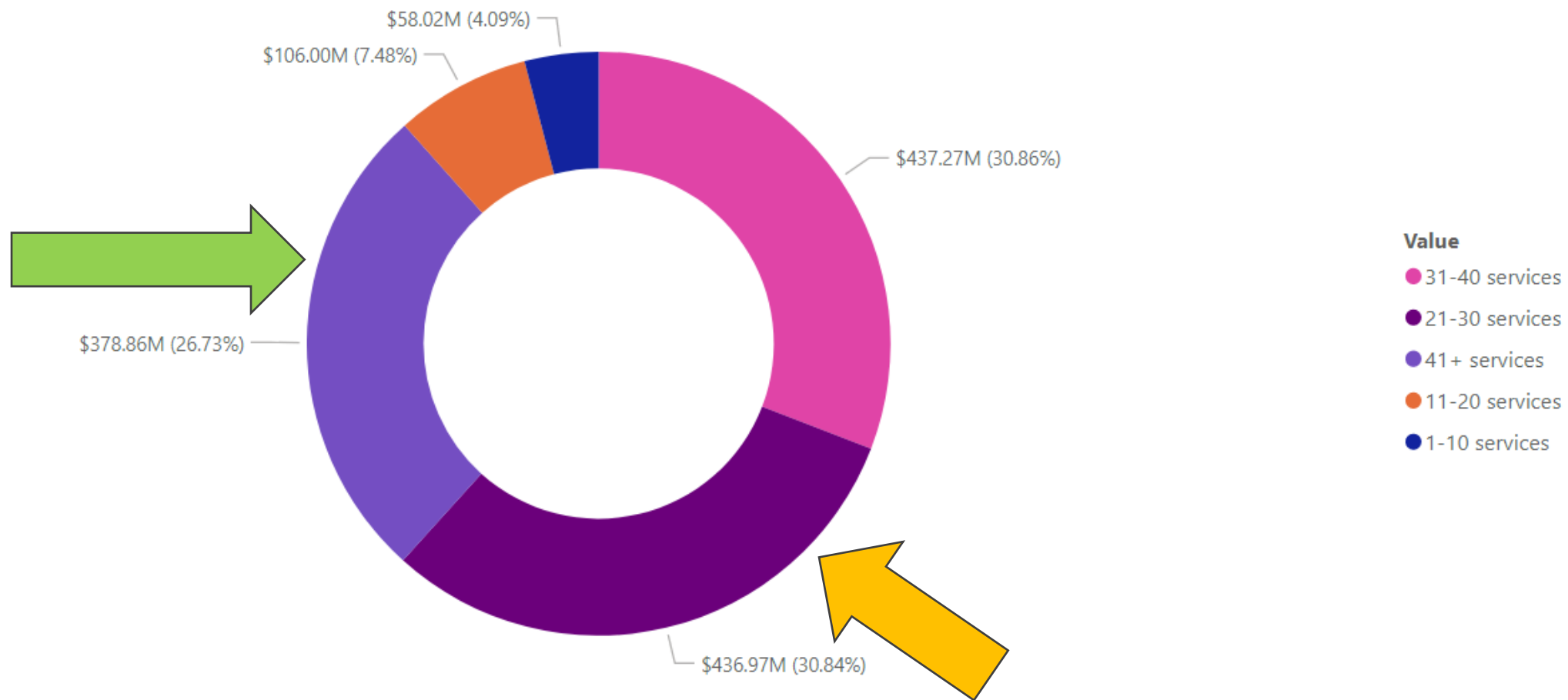
5

**Payments by service and
by modality- Value**

**Windsorized Tech + PRO \$
used**

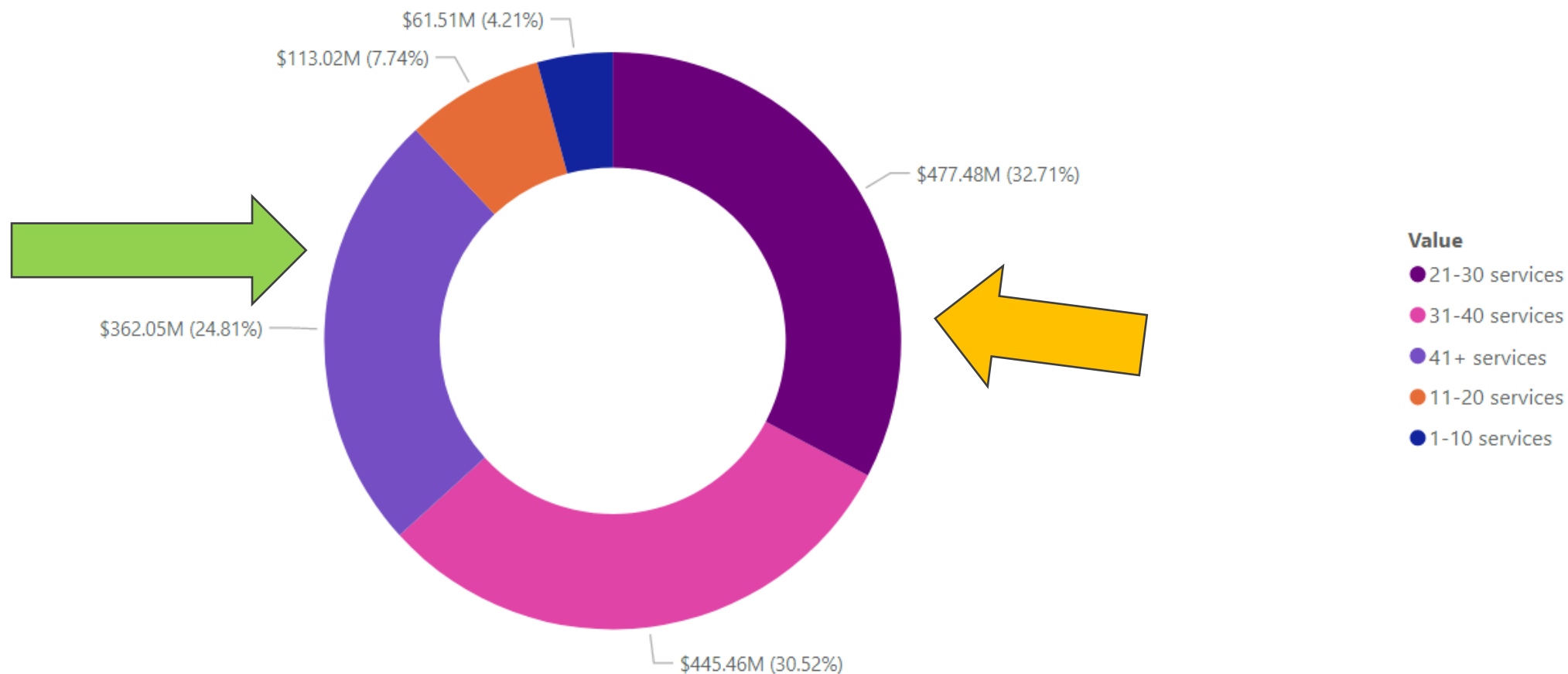
2017 Pay by Service- IMRT- (0 service excluded) By Value

PRO_PAY_PLUS_TECH_PAY by Value



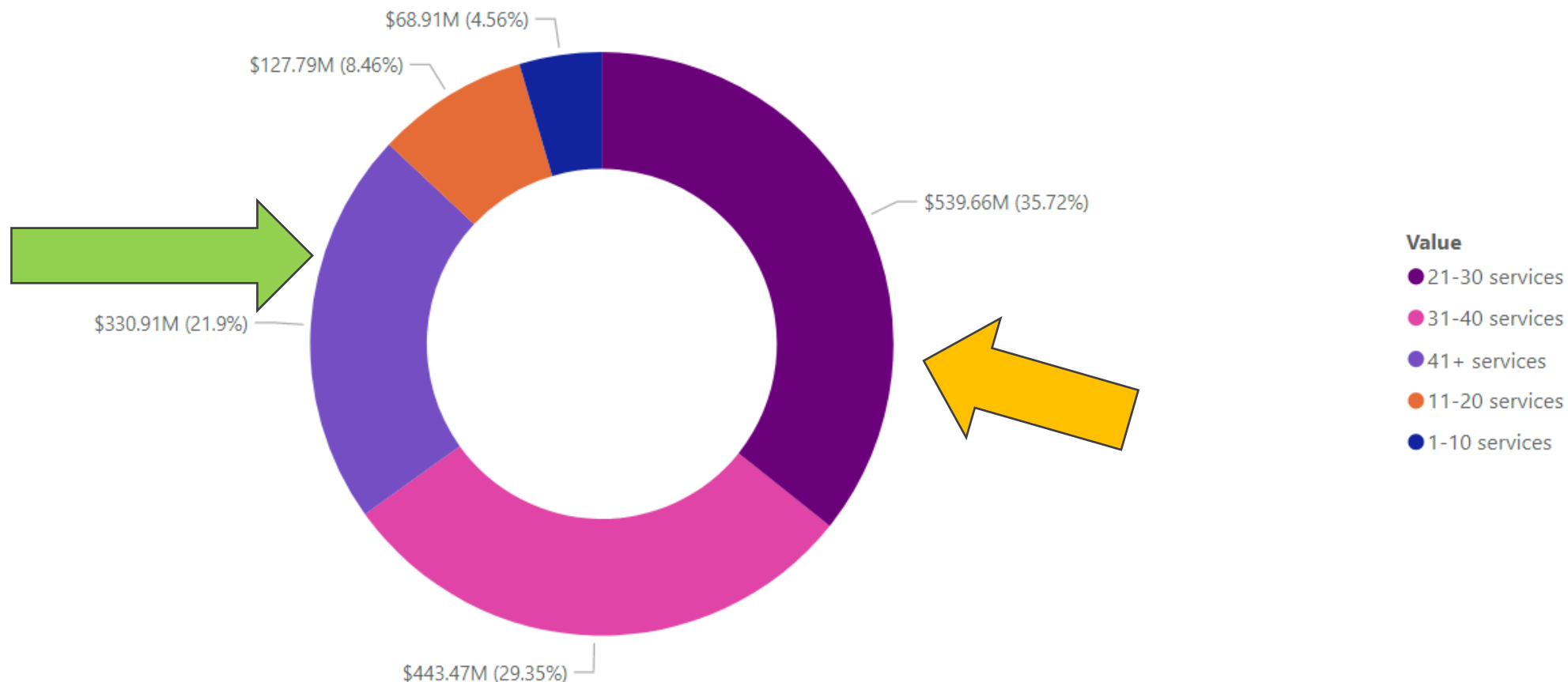
2018 Pay by Service- IMRT- (0 service excluded) By Value

PRO_PAY_PLUS_TECH_PAY by Value

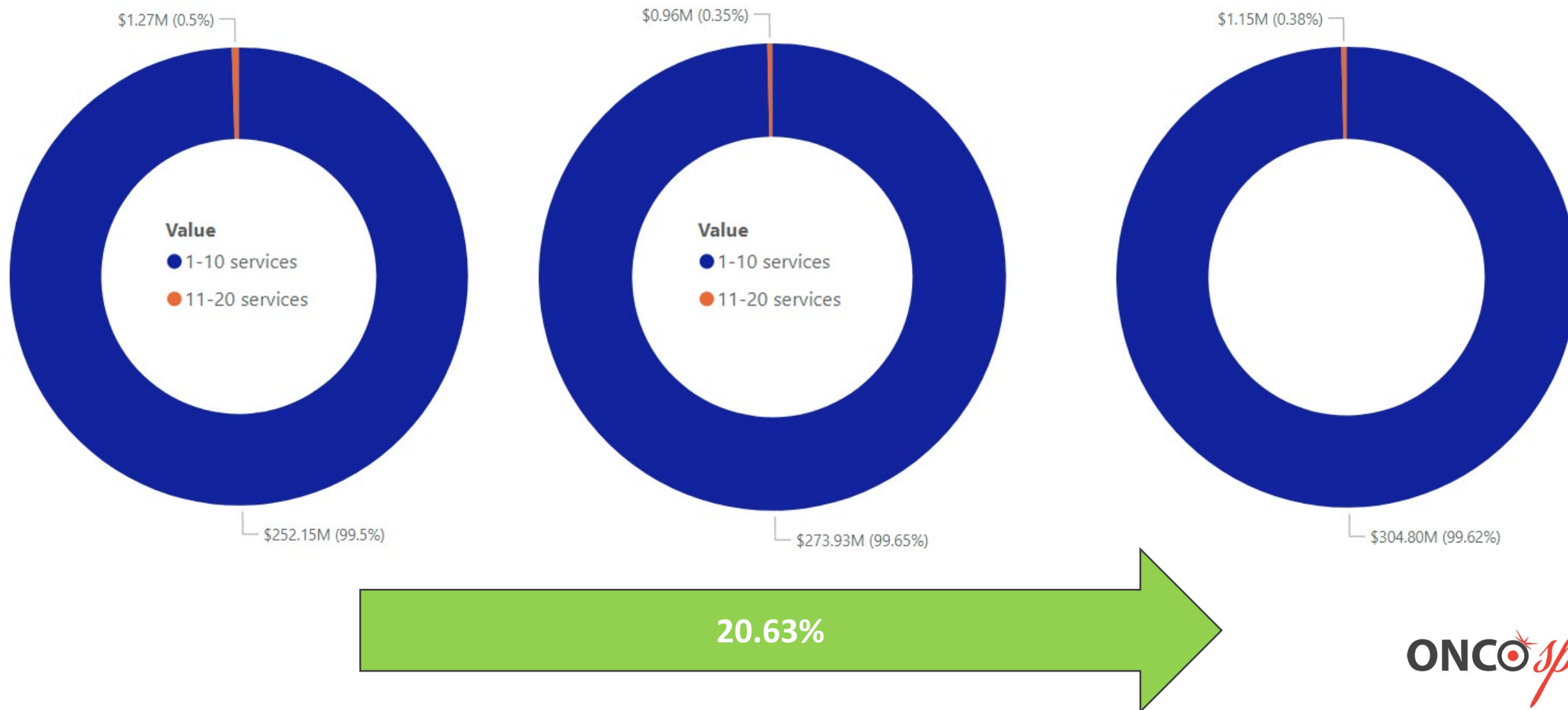


2019 Pay by Service- IMRT- (0 service excluded) By Value

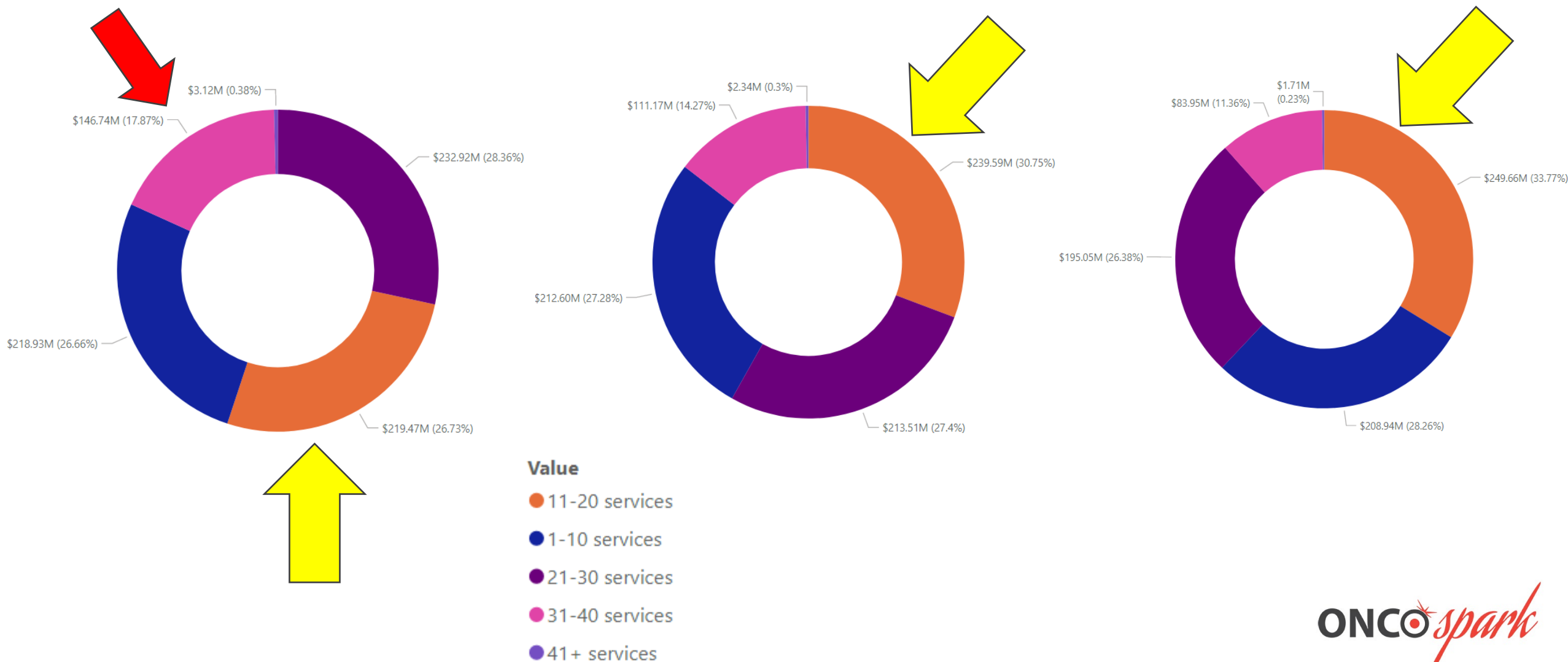
PRO_PAY_PLUS_TECH_PAY by Value



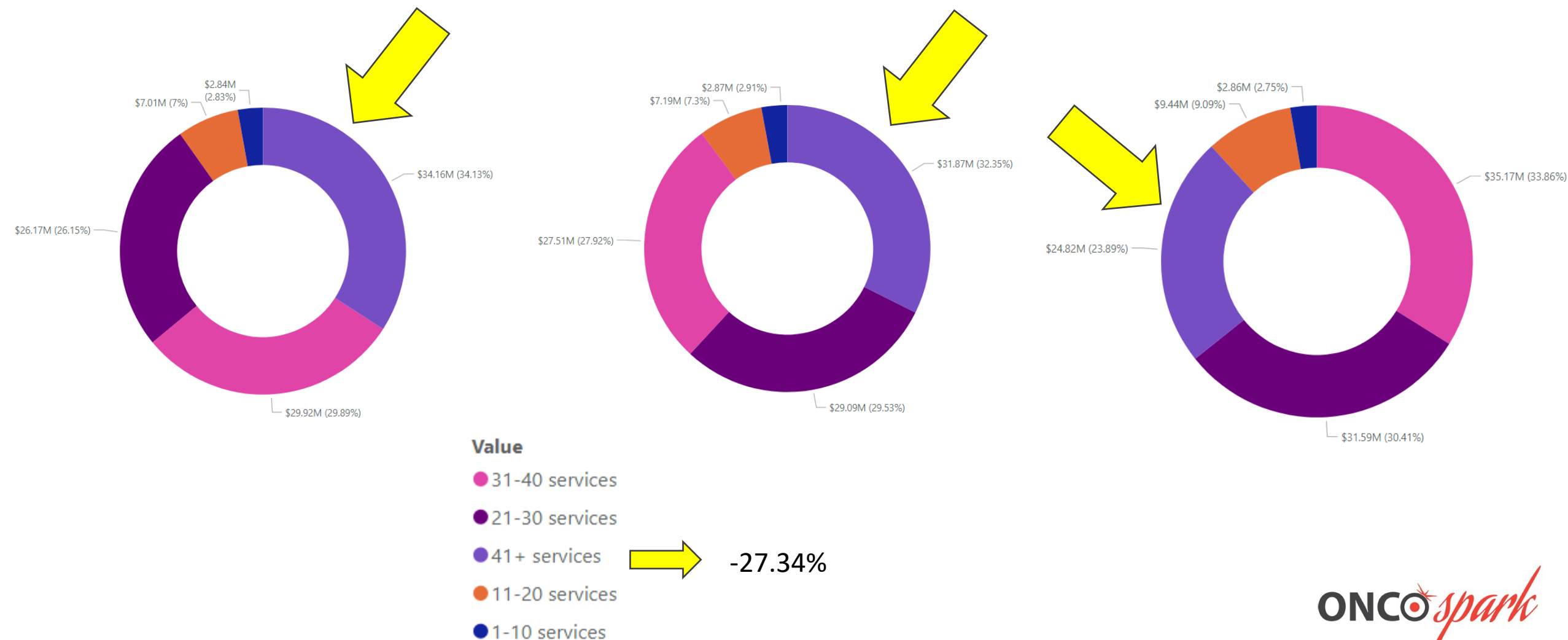
Pay by Service- SBRT- (0 service excluded) 2017 (left) - 2019



Pay by Service- CEB- (0 service excluded) 2017 (left) - 2019



Pay by Service- Proton- (0 service excluded) 2017 (left) - 2019



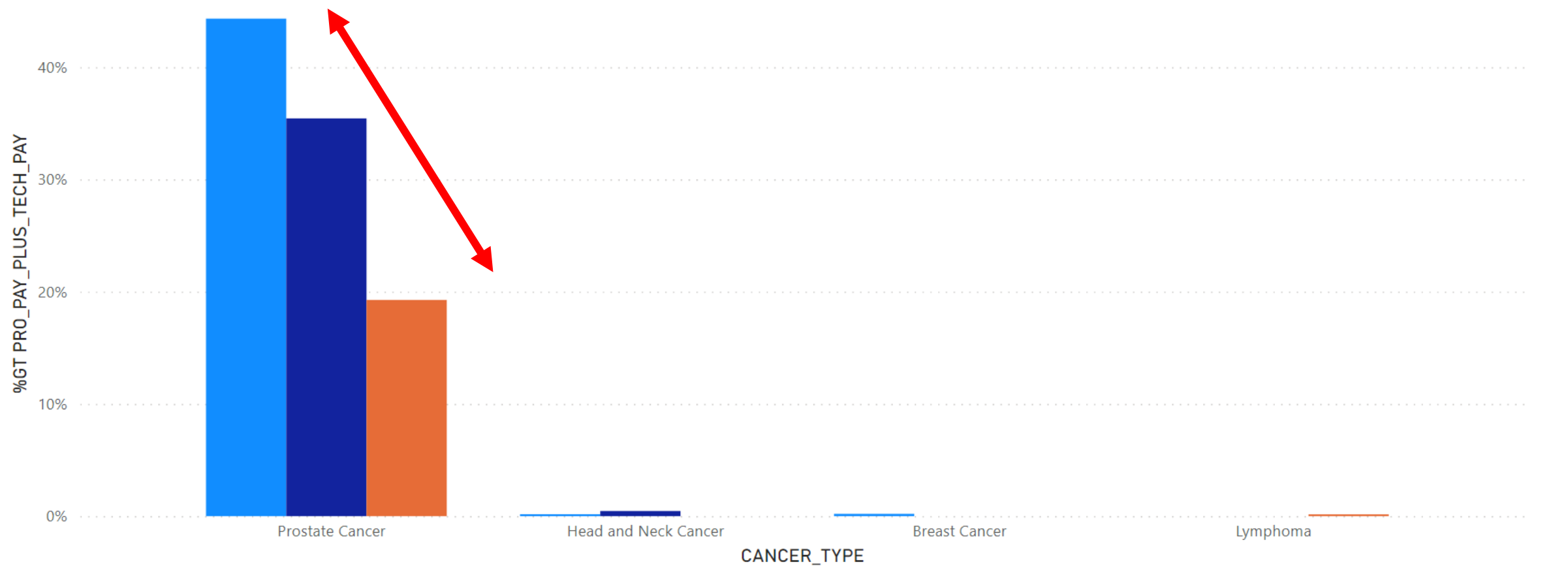
6

**Payment percentage by
modality, year, disease
site, PRO & TECH**

Payment Presents Proton- 41+ services

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and YEAR

YEAR ● 2017 ● 2018 ● 2019

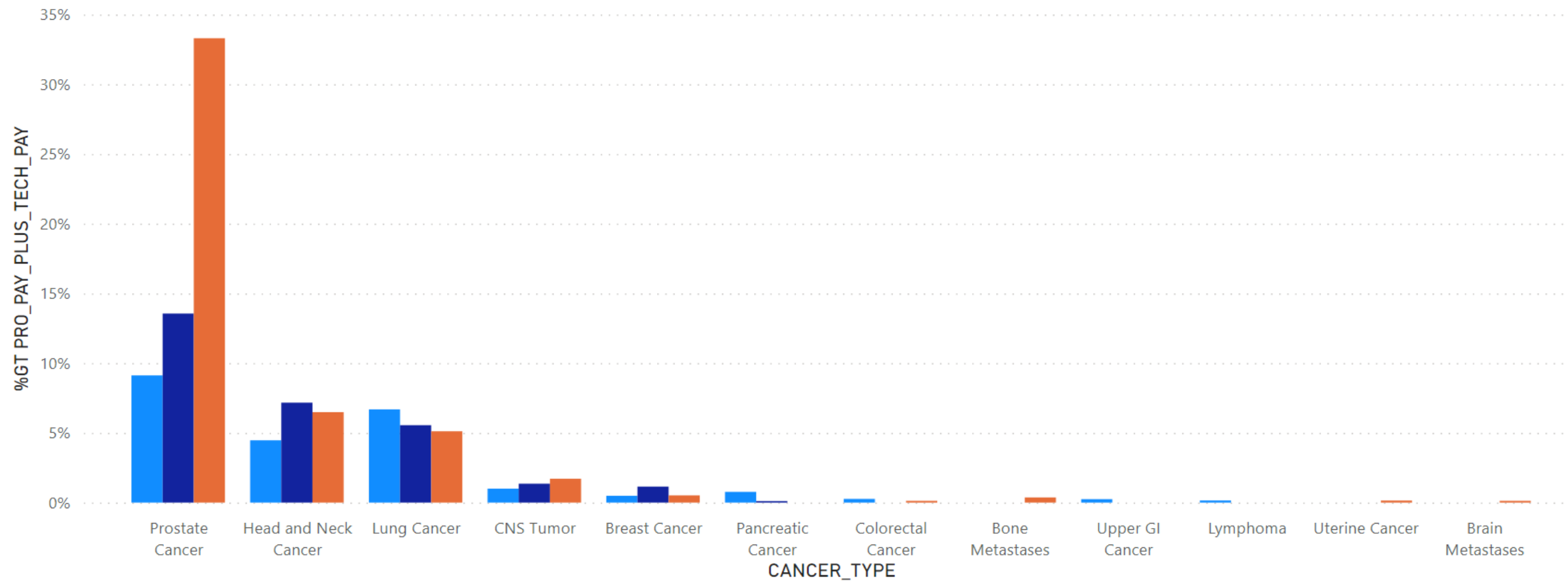


Payment Presents Proton- 31-40 services

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and YEAR



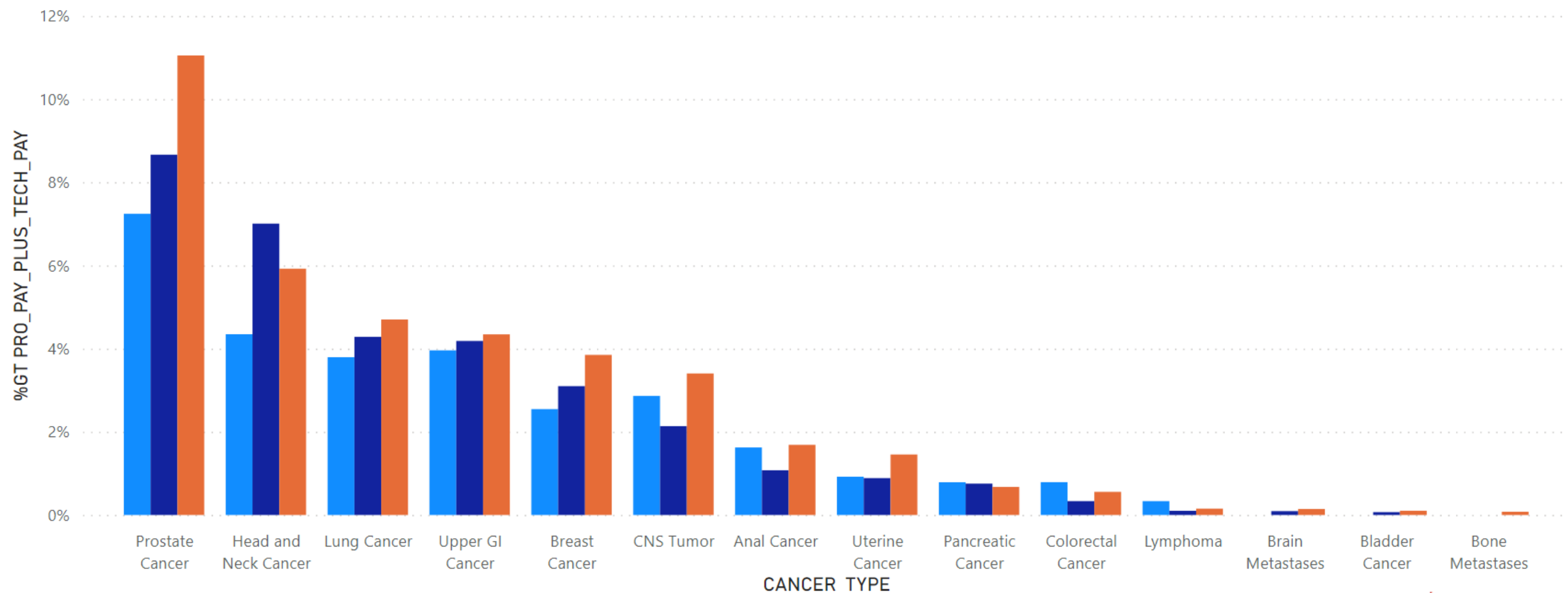
YEAR ● 2017 ● 2018 ● 2019



Payment Preents Proton- 21-30 services

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and YEAR

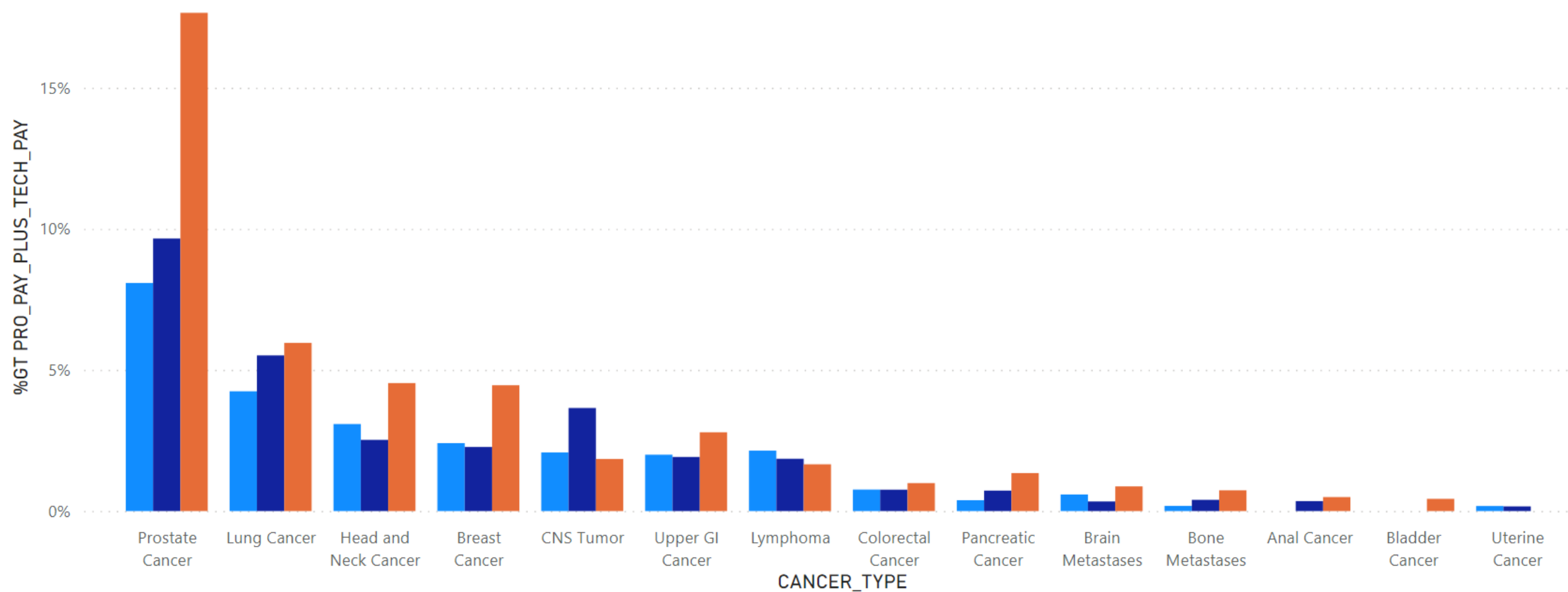
YEAR ● 2017 ● 2018 ● 2019



Payment Preents Proton- 11-20 services

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and YEAR

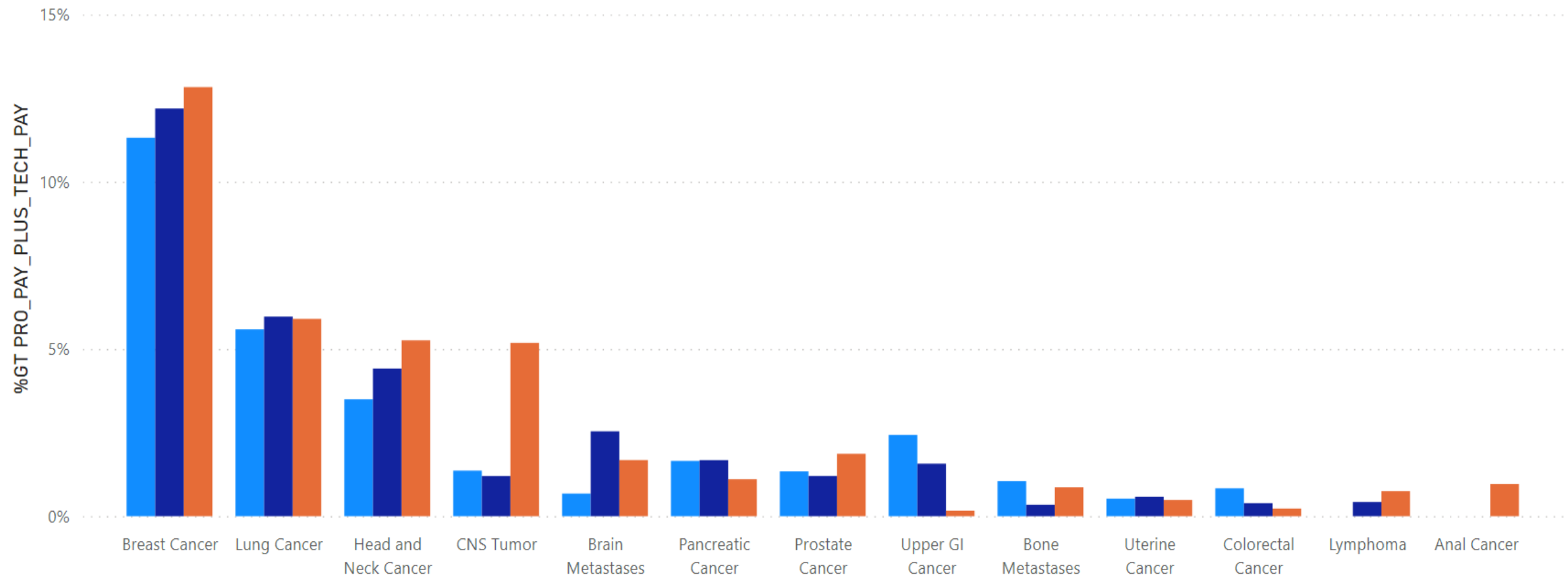
YEAR ● 2017 ● 2018 ● 2019



Payment Precents Proton- 1-10 services

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and YEAR

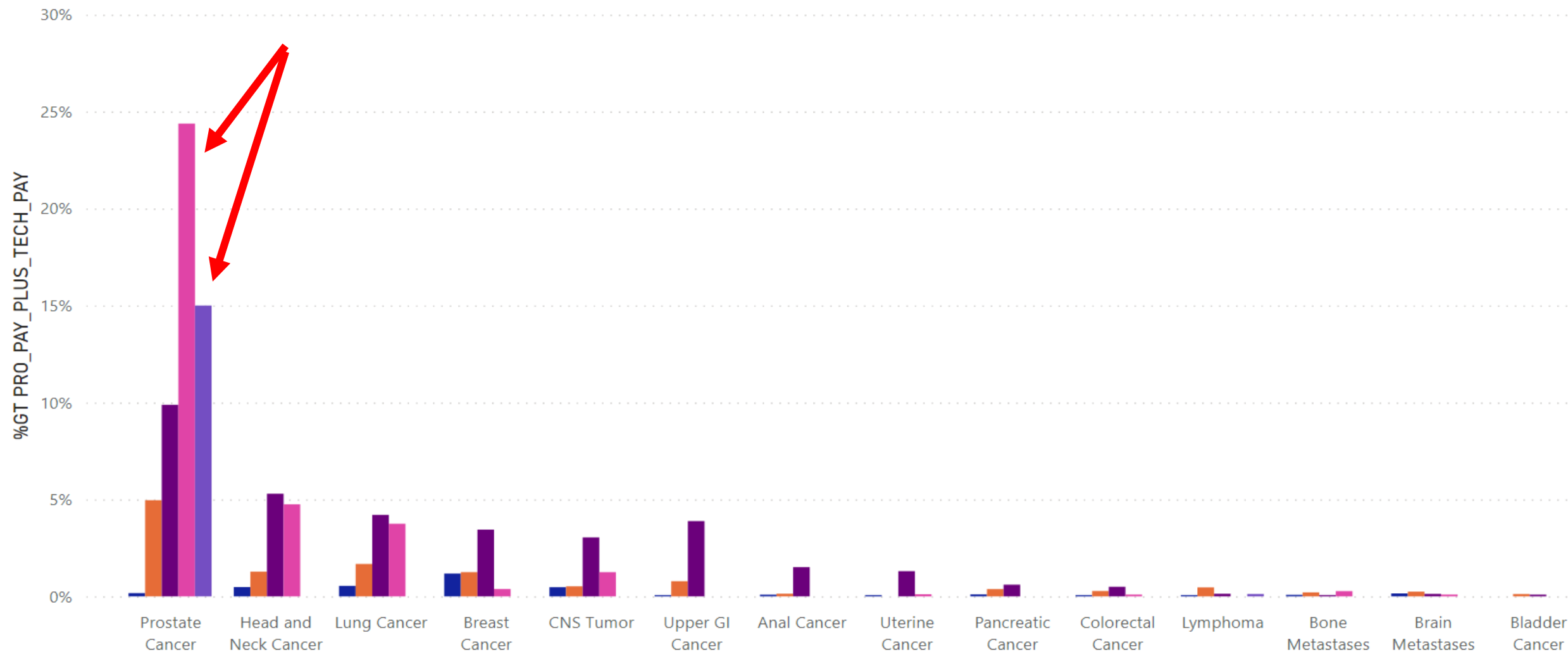
YEAR ● 2017 ● 2018 ● 2019



Pro and Tech Pay by Percent- Proton 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

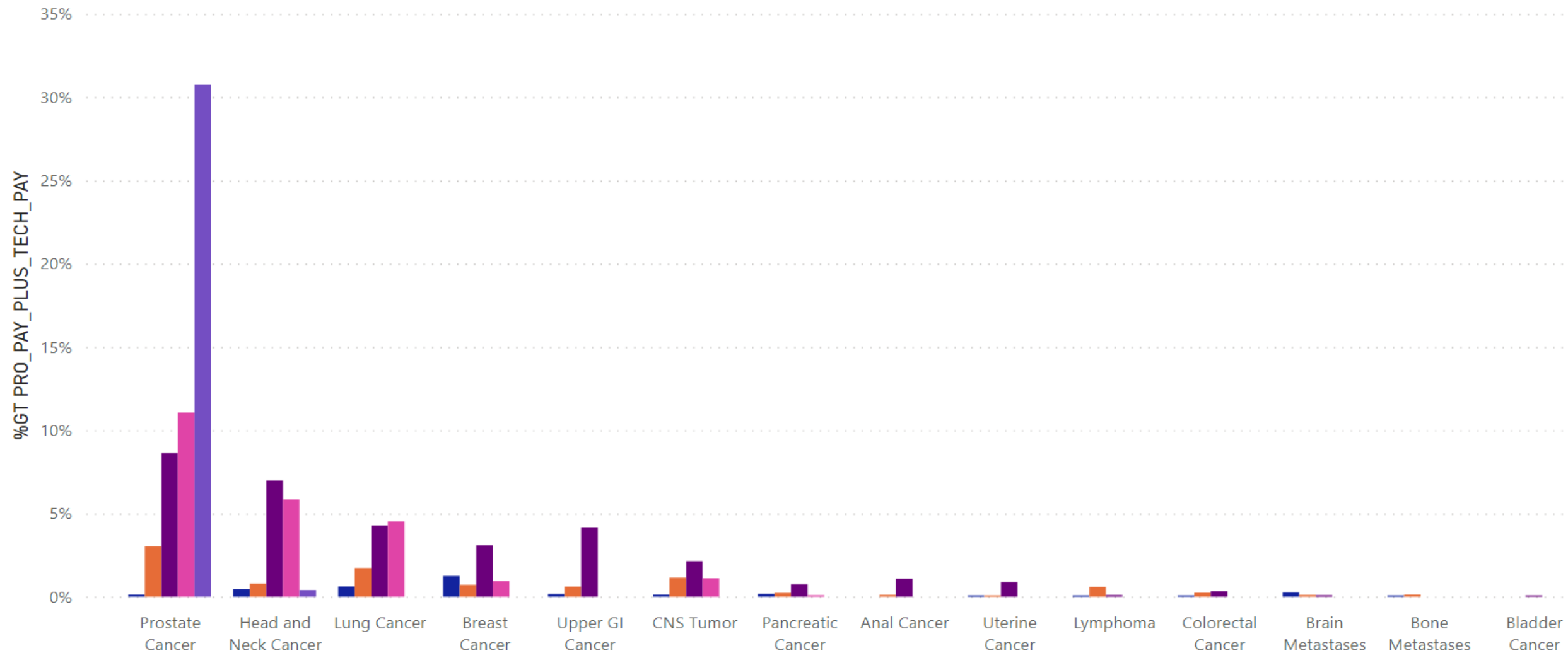
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- Proton 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

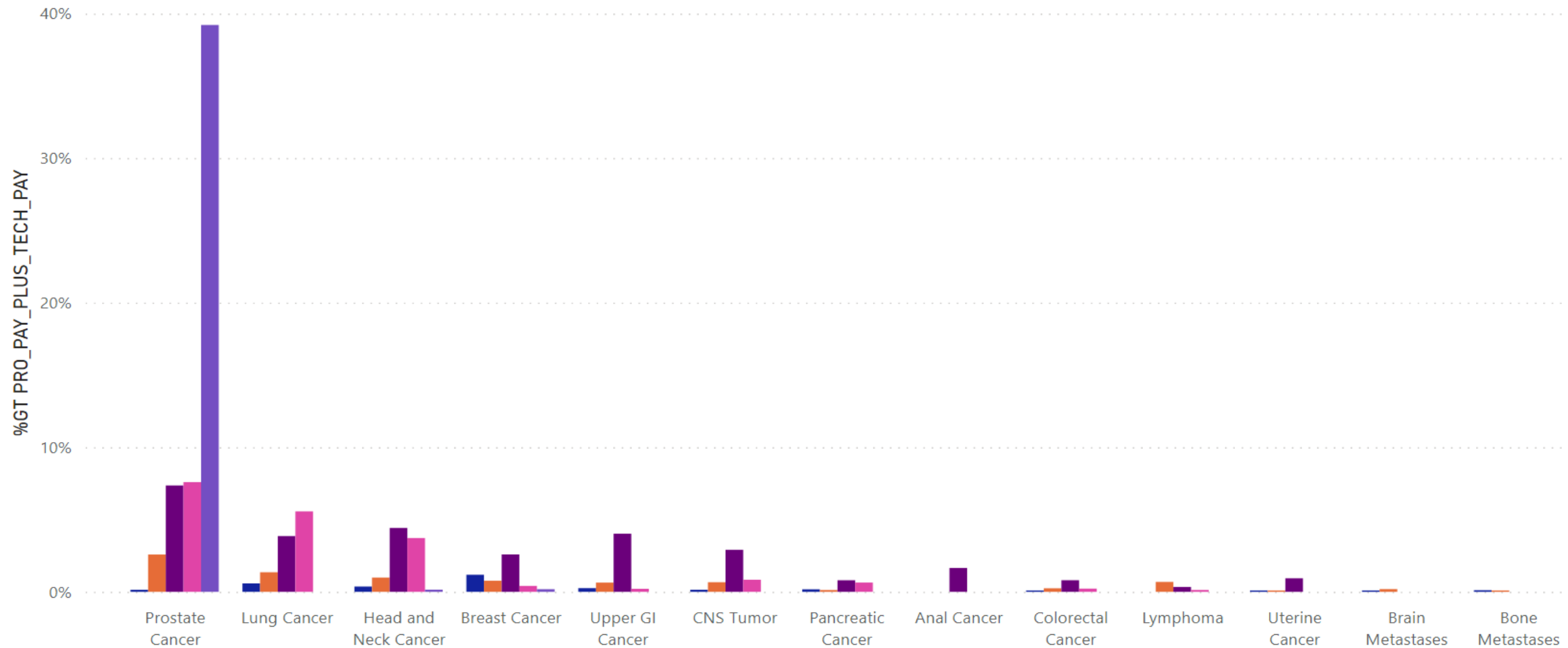
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- Proton 2017

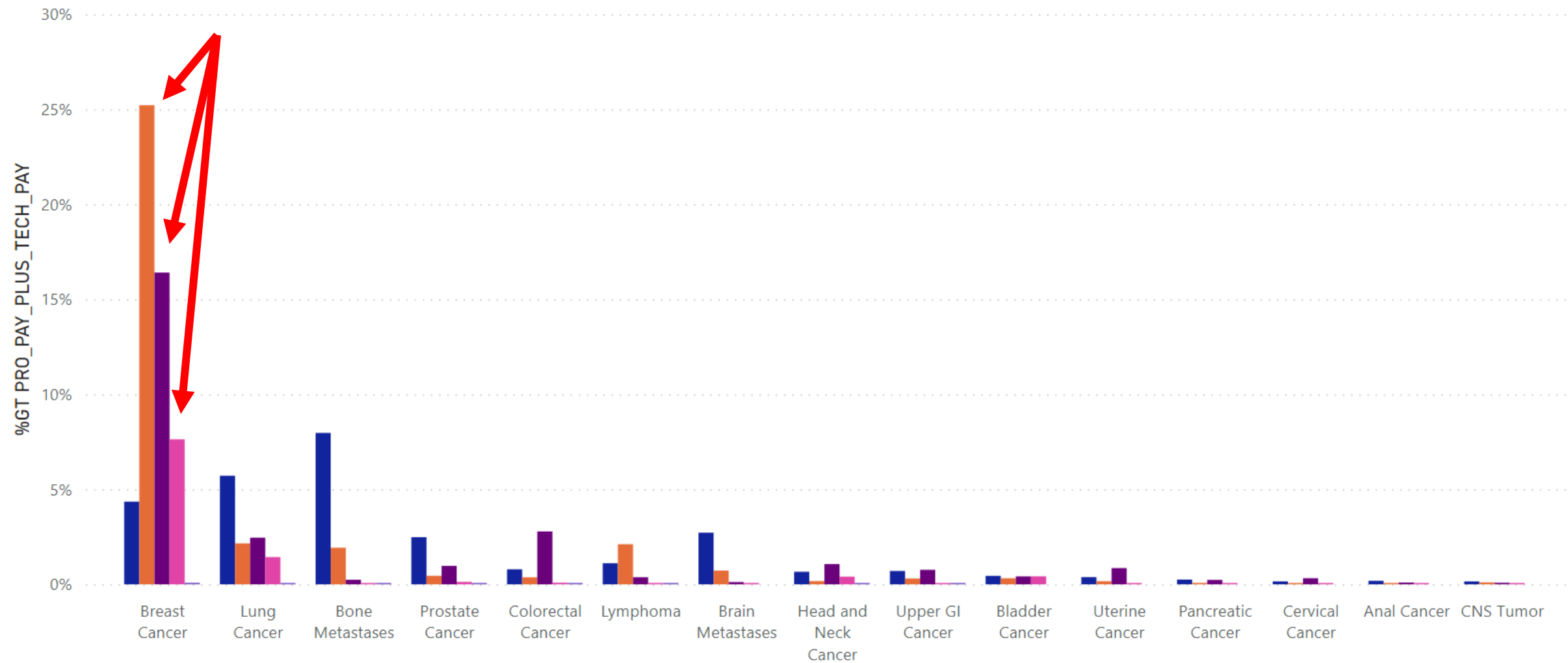
%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- CEB 2019

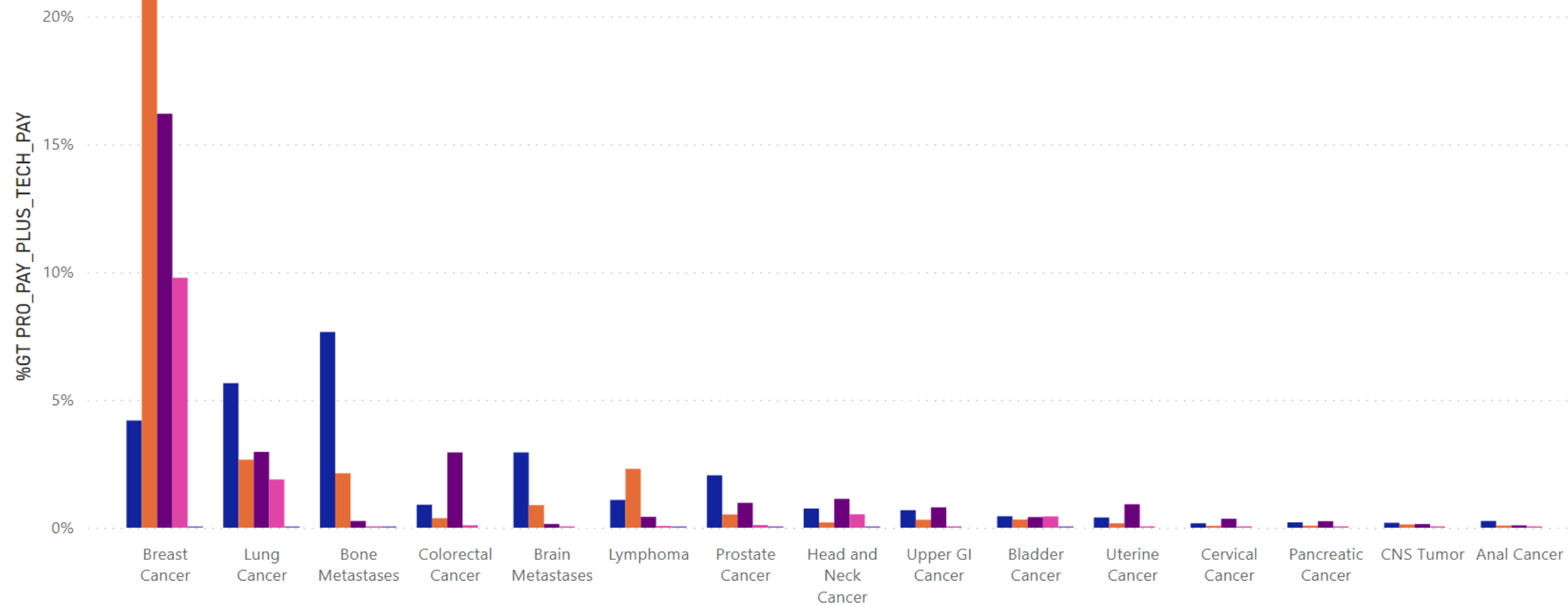
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- CEB 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

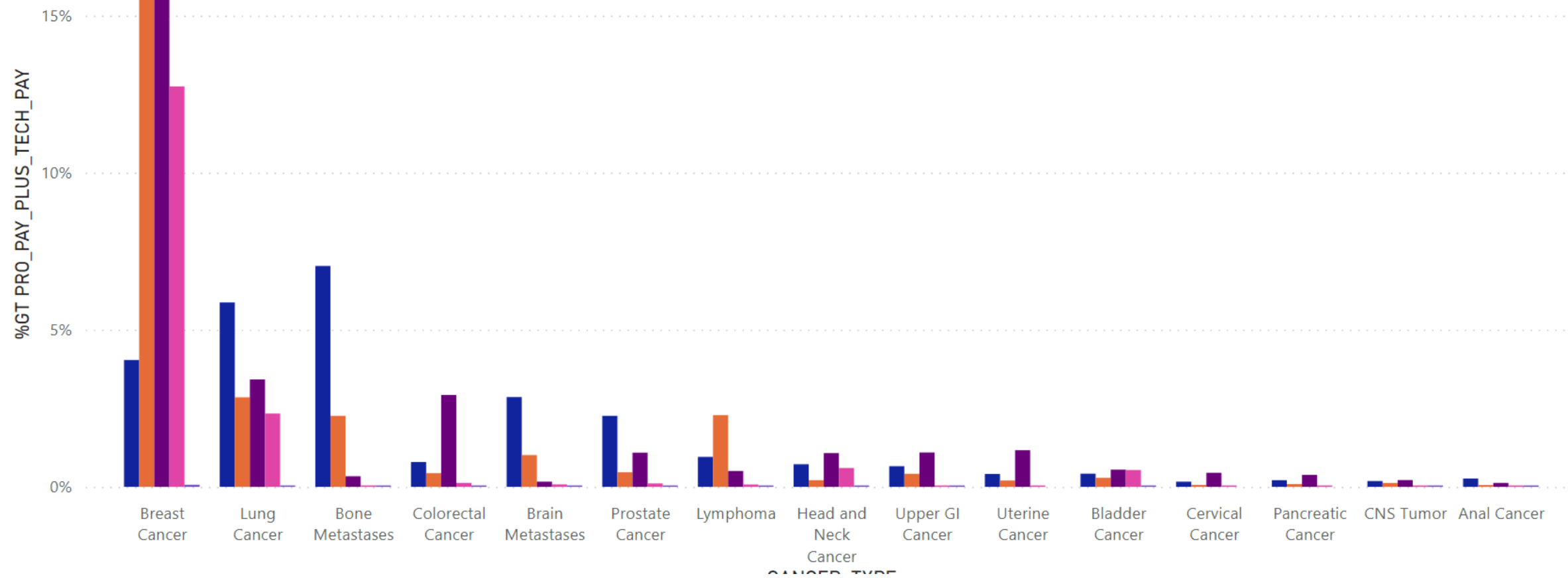
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- CEB 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

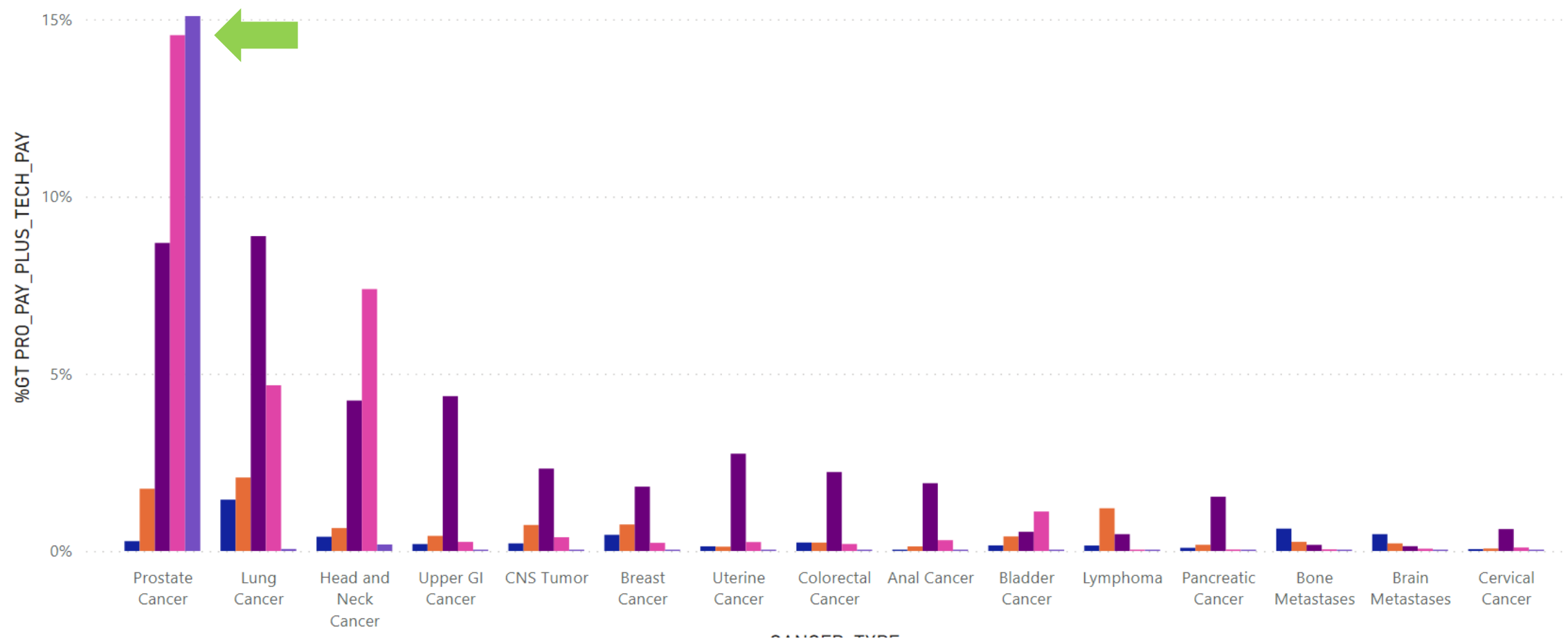
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- IMRT 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

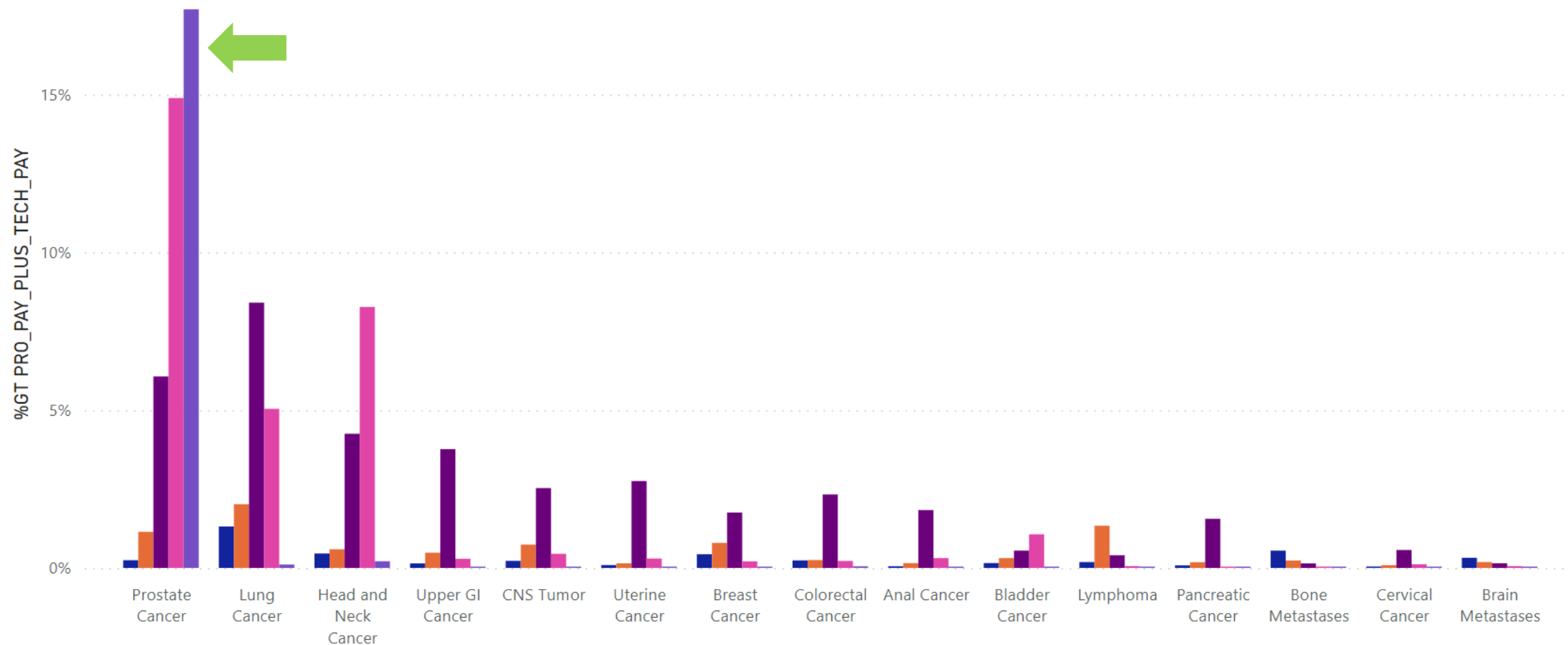
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- IMRT 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

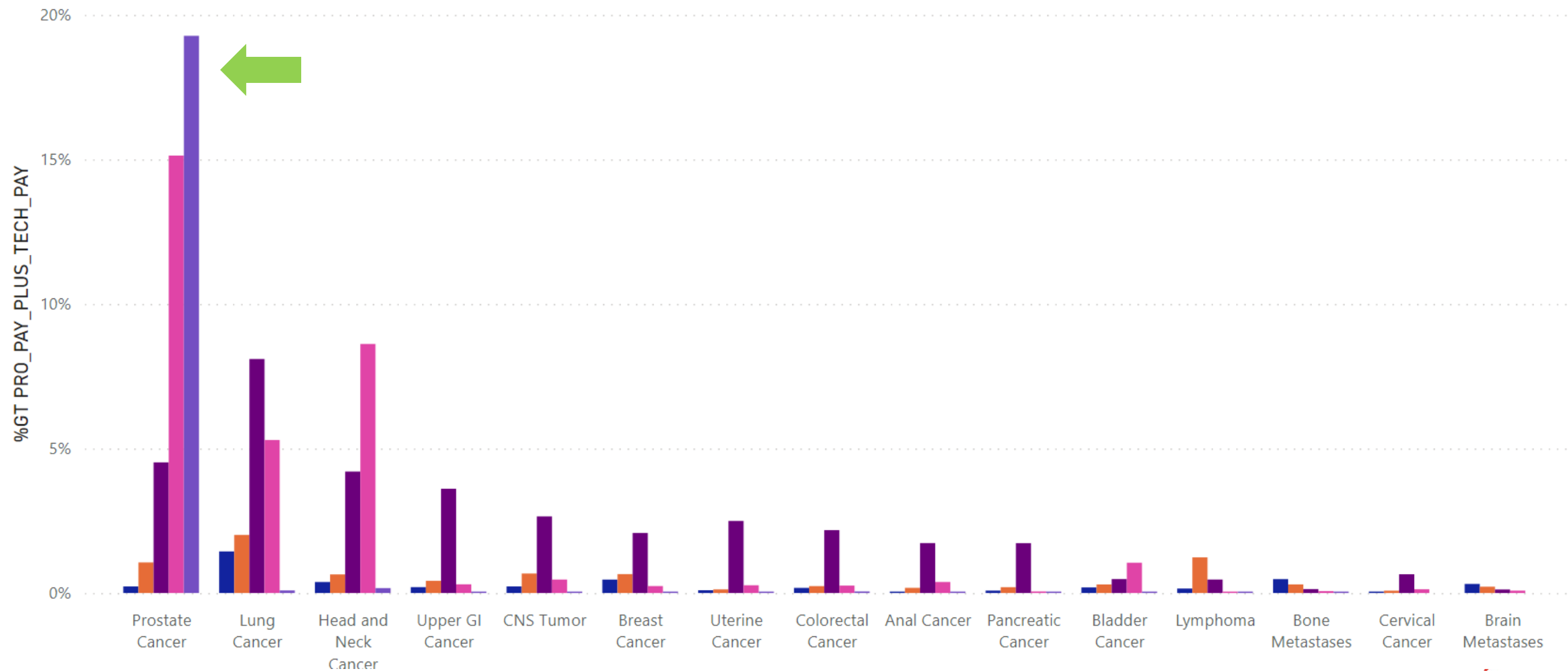
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- IMRT 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

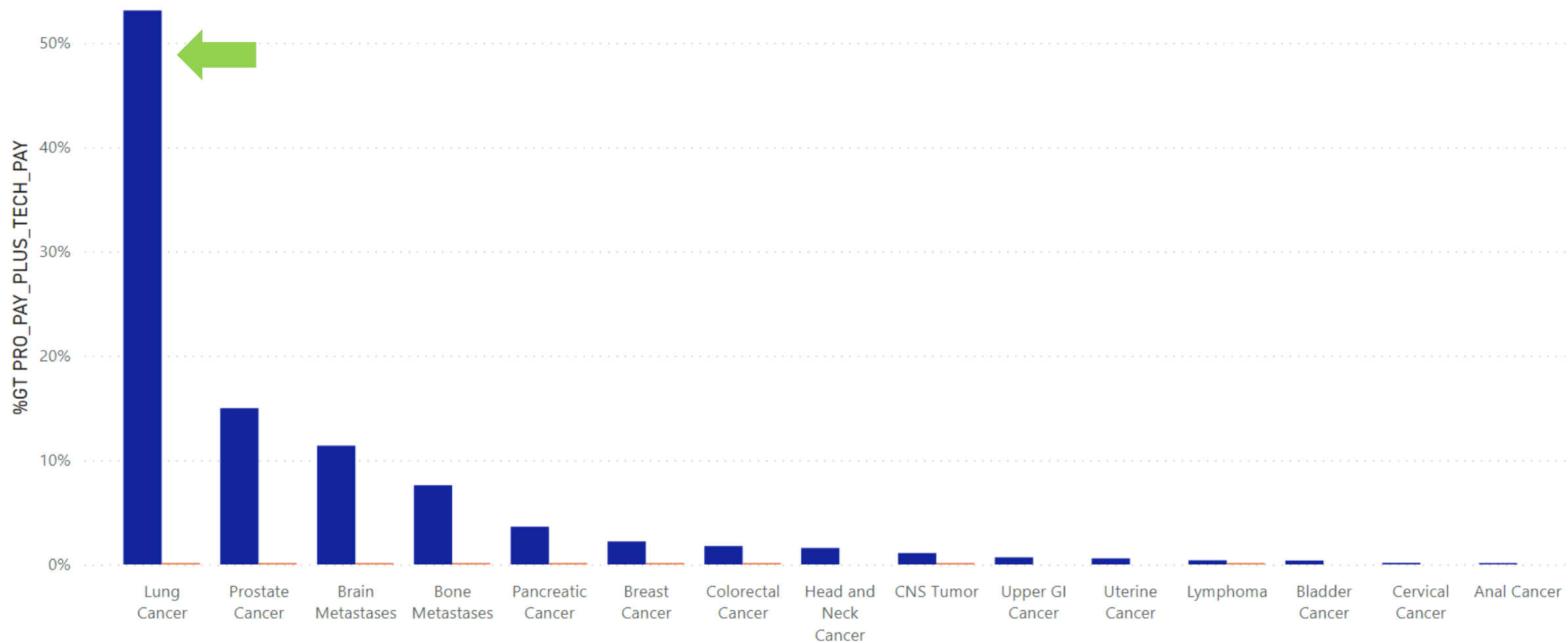
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Pro and Tech Pay by Percent- SBRT 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

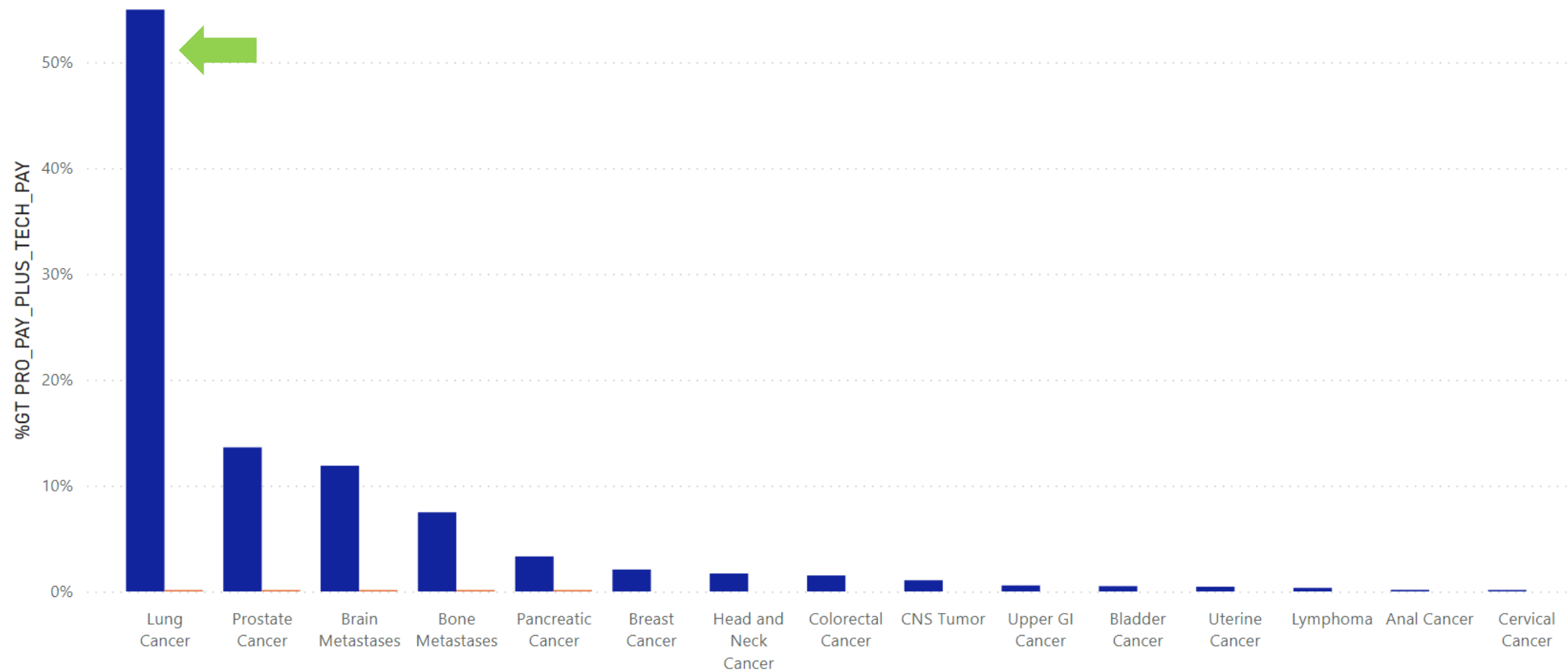
Value ● 1-10 services ● 11-20 services



Pro and Tech Pay by Percent- SBRT 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

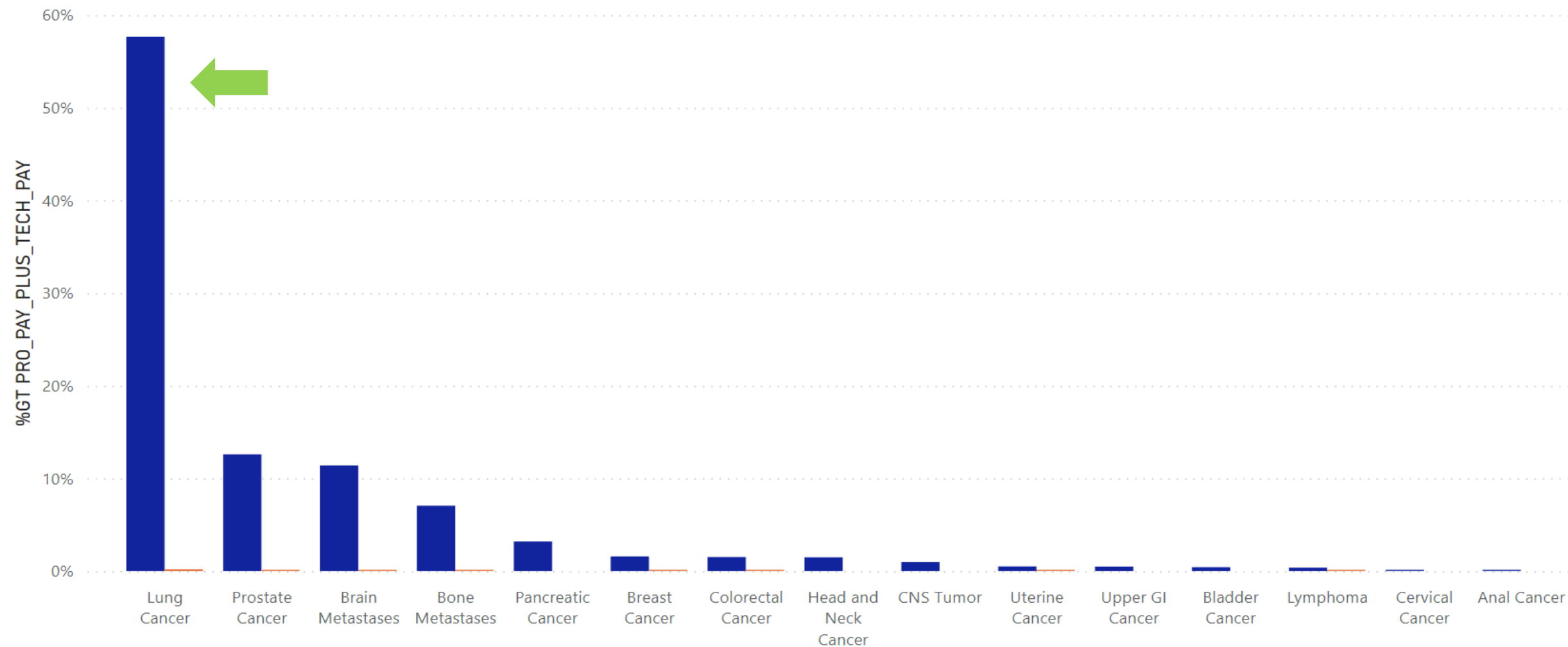
Value ● 1-10 services ● 11-20 services



Pro and Tech Pay by Percent- SBRT 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

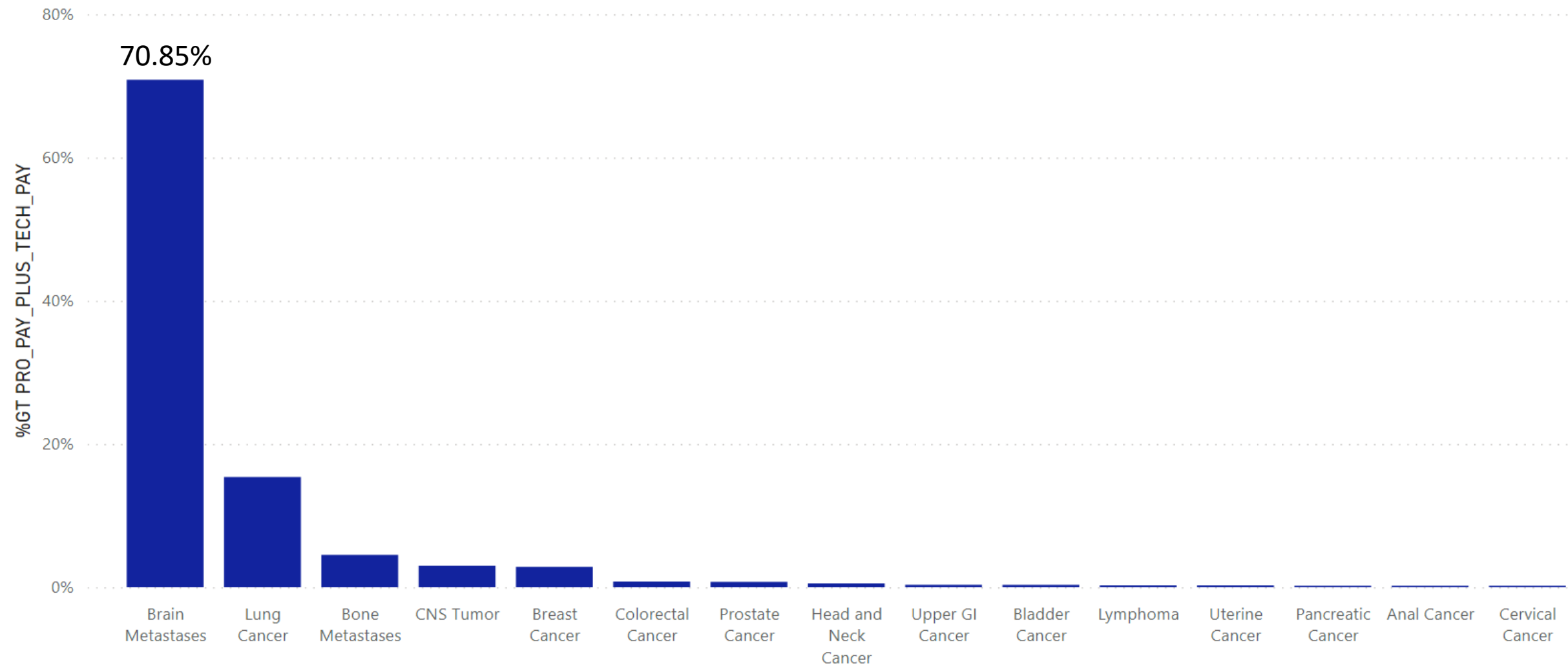
Value ● 1-10 services ● 11-20 services



Pro and Tech Pay by Percent- SRS 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

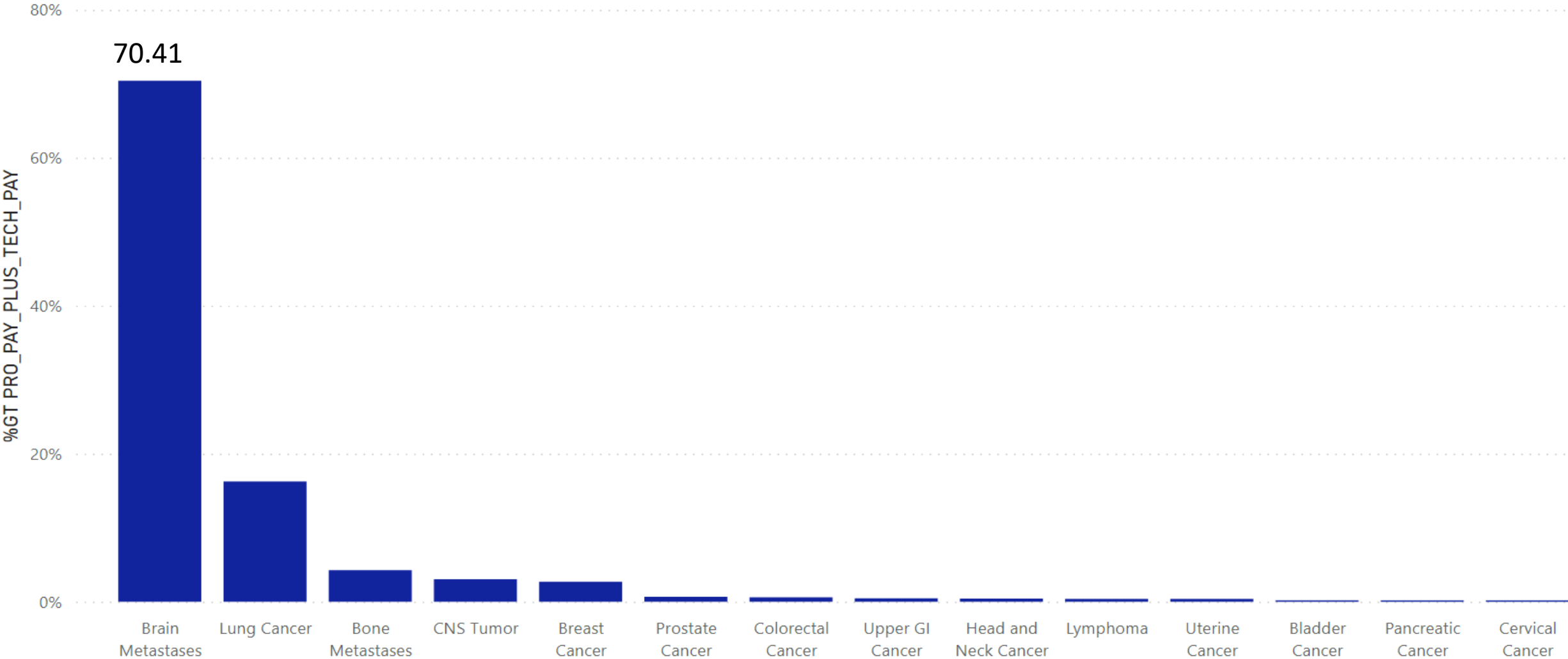
Value ● 1-10 services



Pro and Tech Pay by Percent- SRS 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

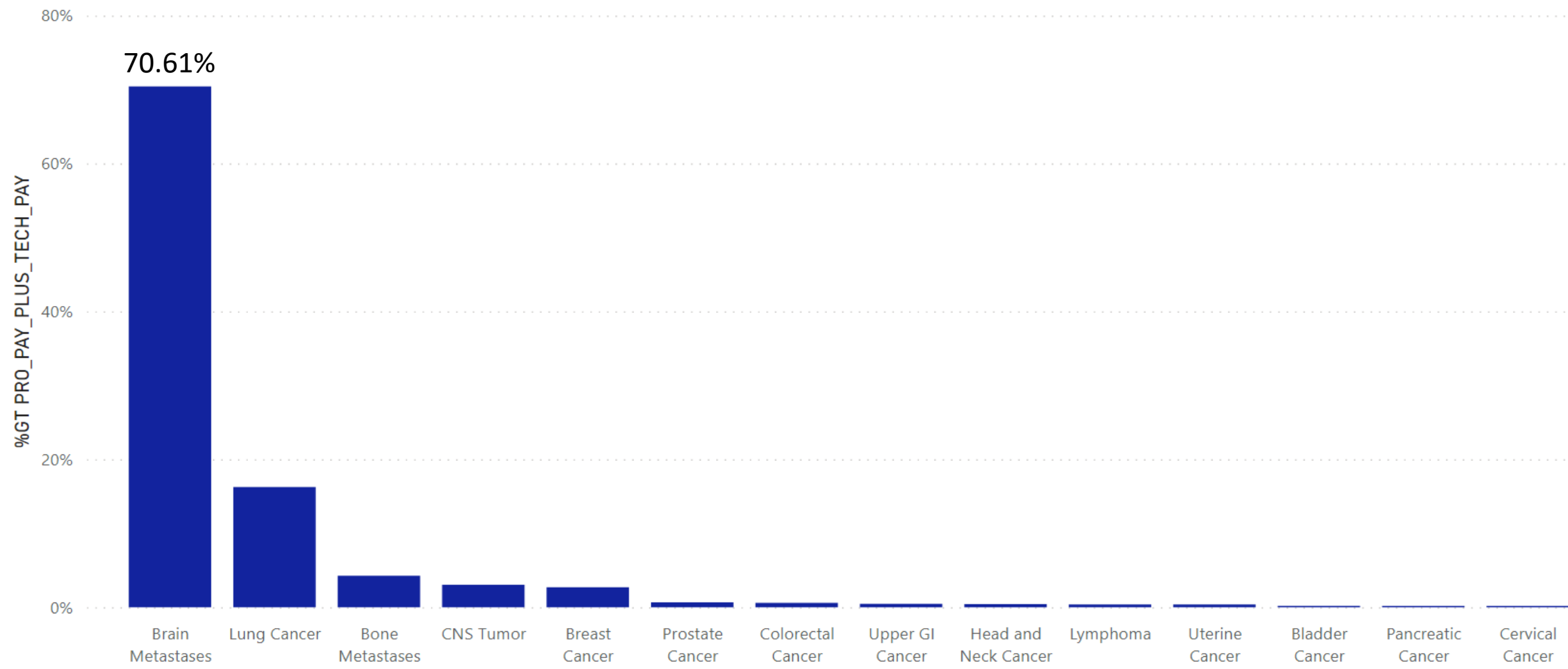
Value ● 1-10 services



Pro and Tech Pay by Percent- SRS 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

Value ● 1-10 services



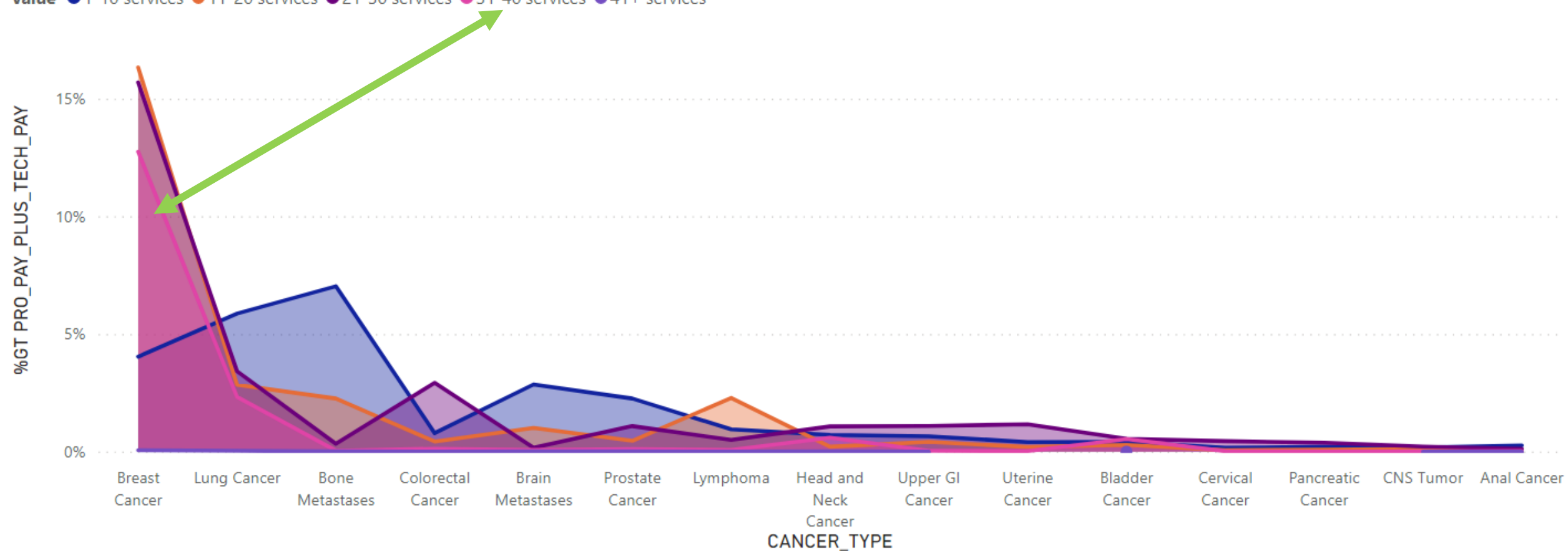
7

**Payment percentages by
modality, year, disease
site, PRO & TECH
Variable Graph**

Percent Pro Pay and Tech Pay CEB - 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

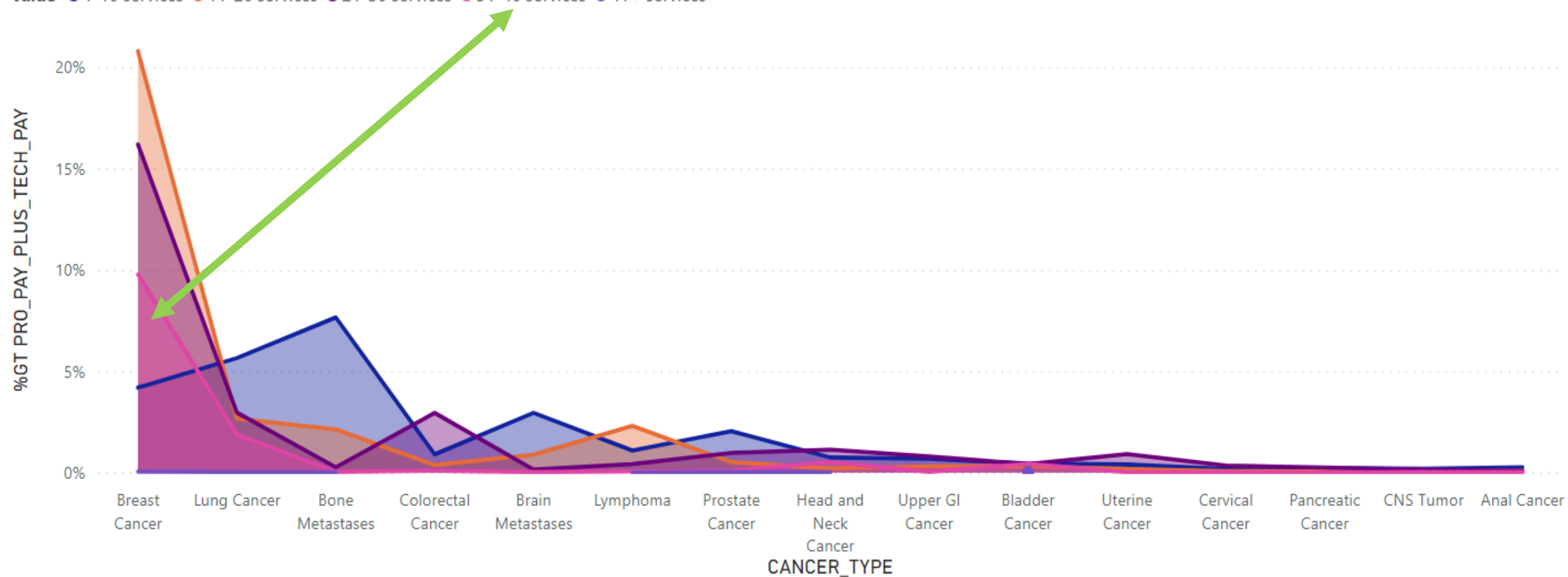
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay CEB - 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

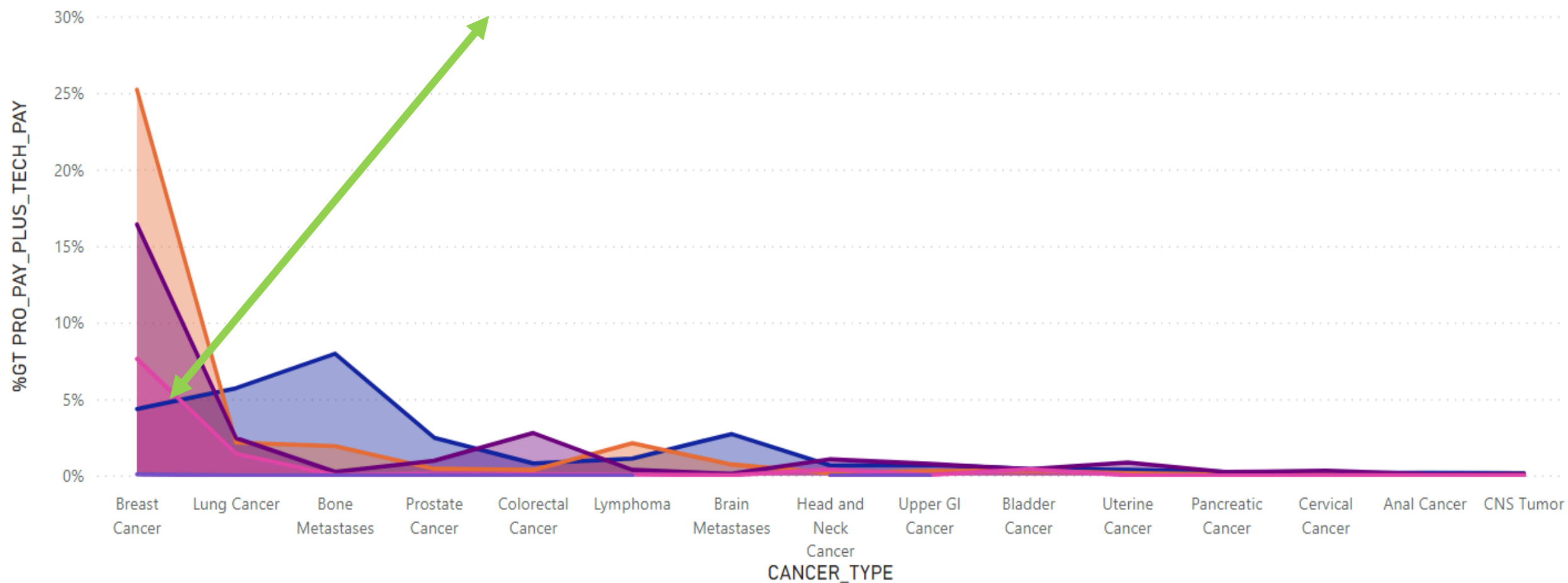
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay CEB - 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

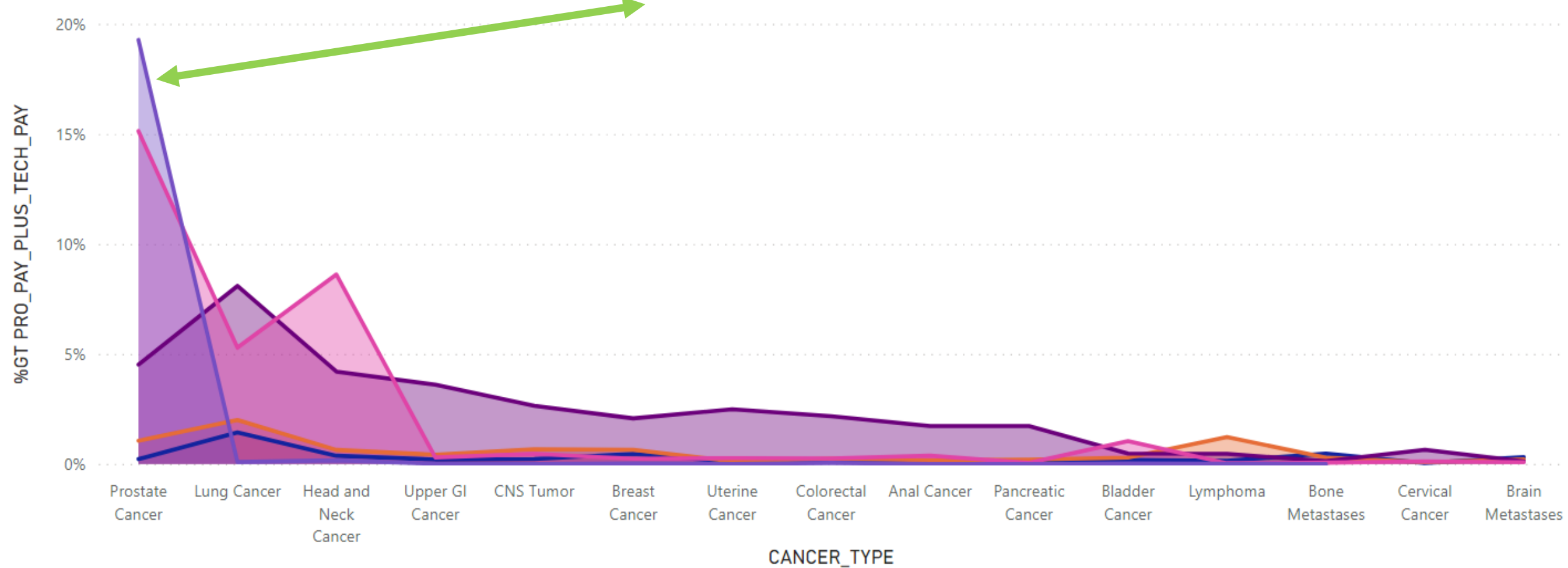
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay IMRT - 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

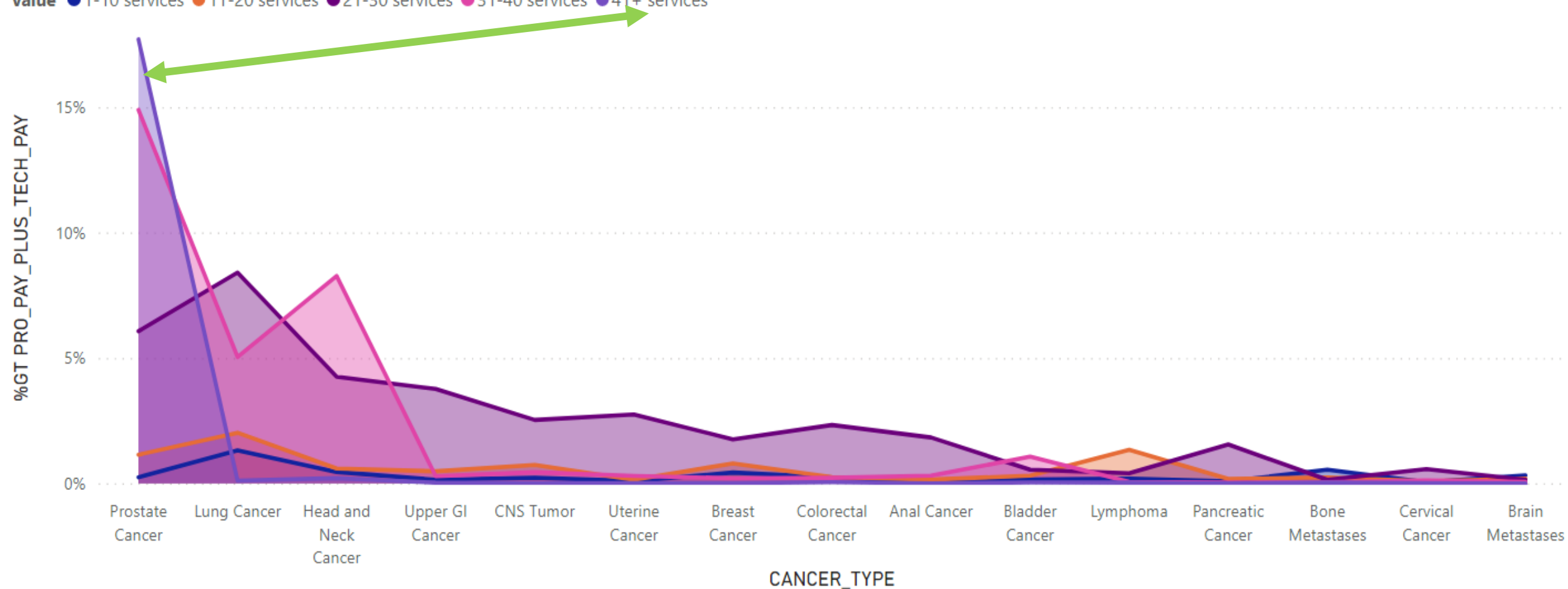
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay IMRT - 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

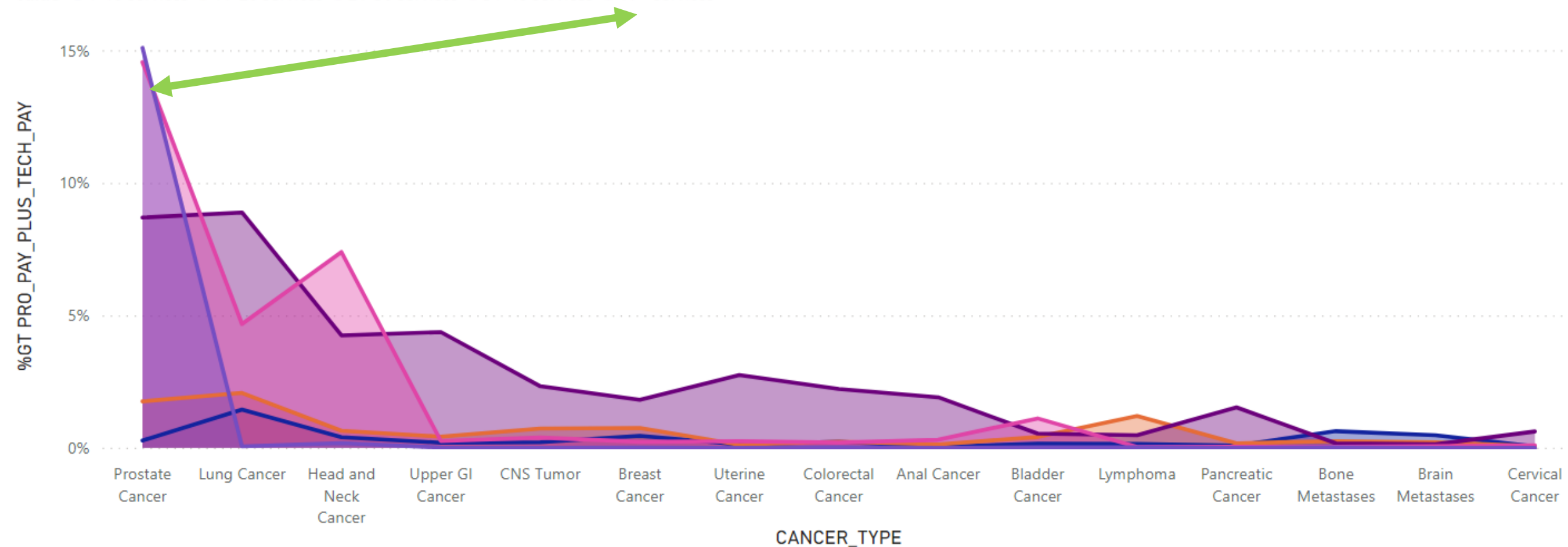
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay IMRT - 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

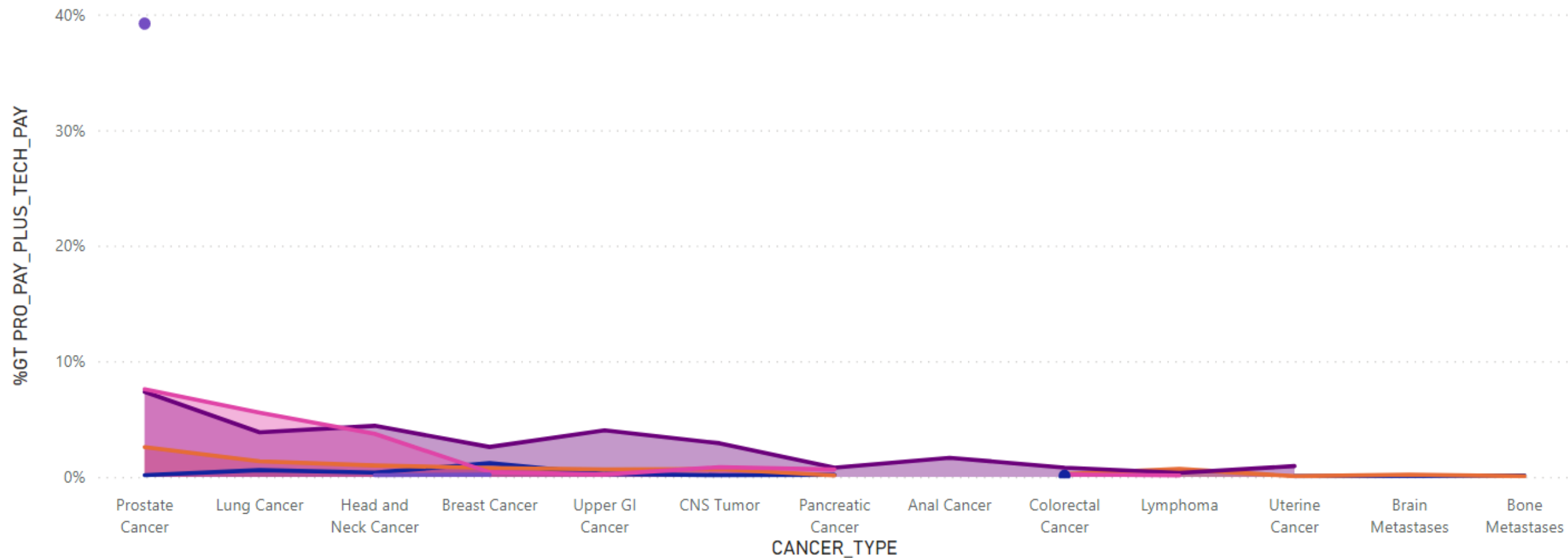
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay Proton - 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

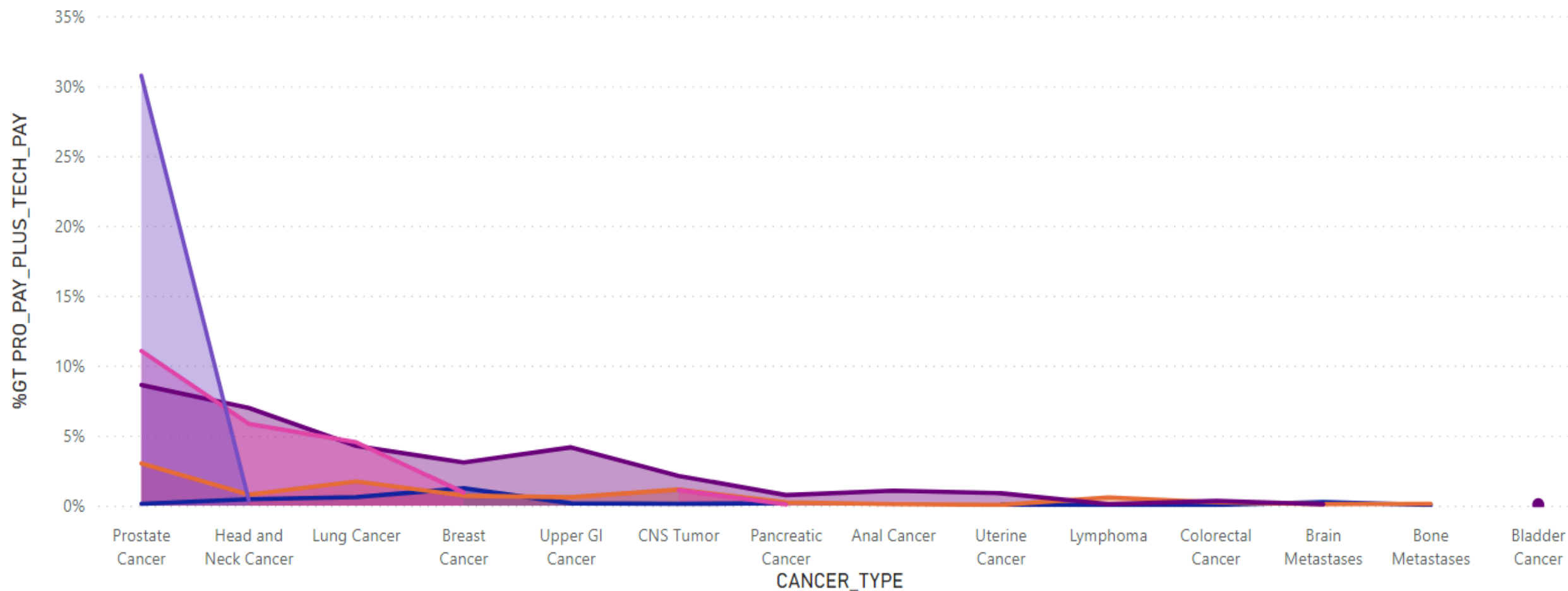
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay Proton - 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

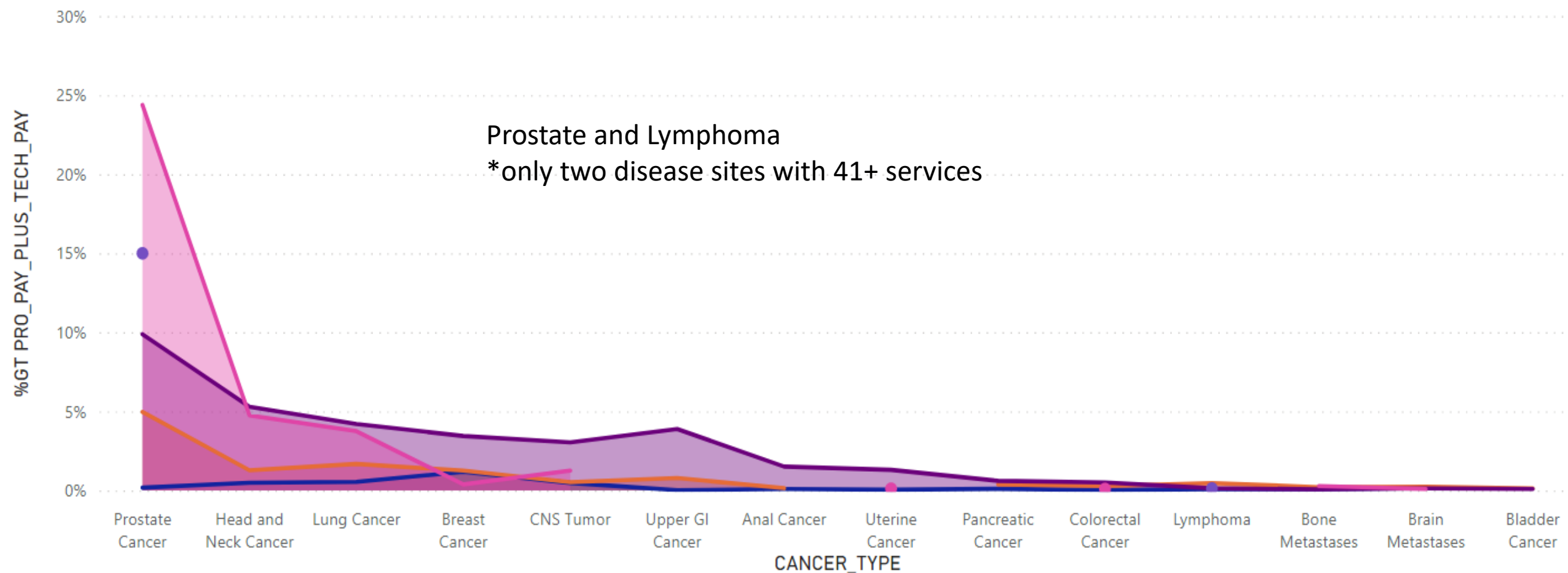
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay Proton - 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

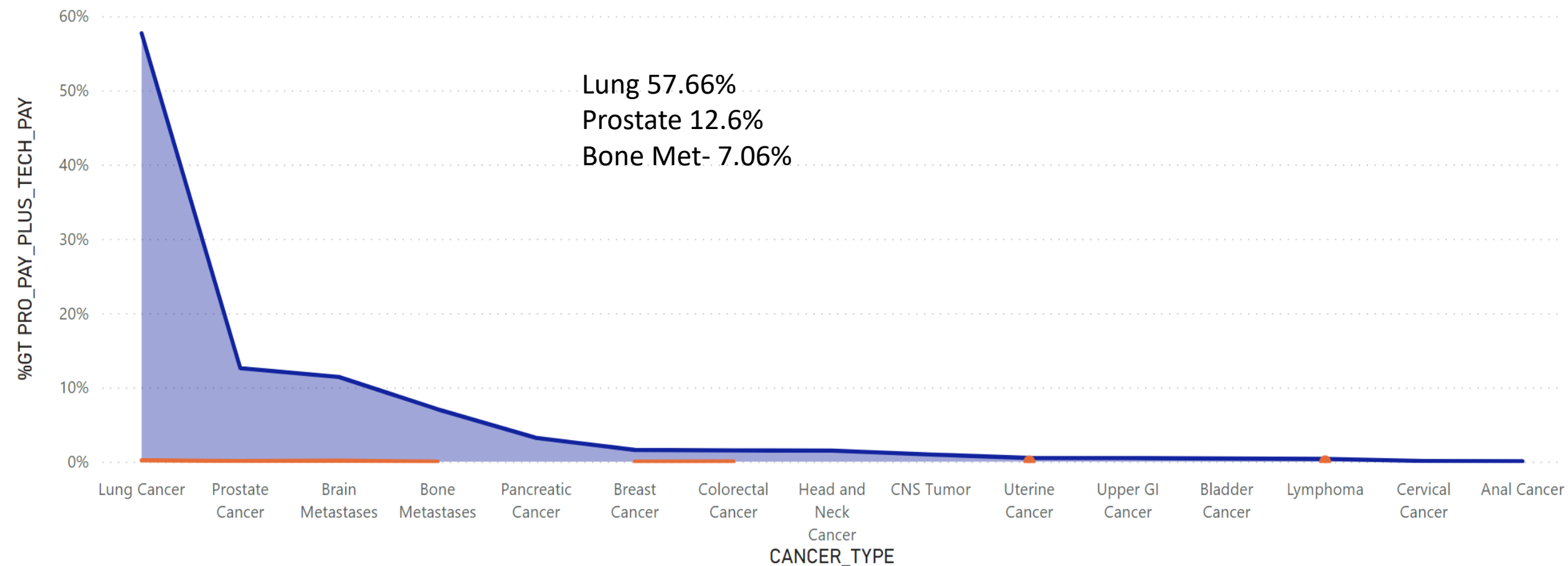
Value ● 1-10 services ● 11-20 services ● 21-30 services ● 31-40 services ● 41+ services



Percent Pro Pay and Tech Pay SBRT - 2017

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

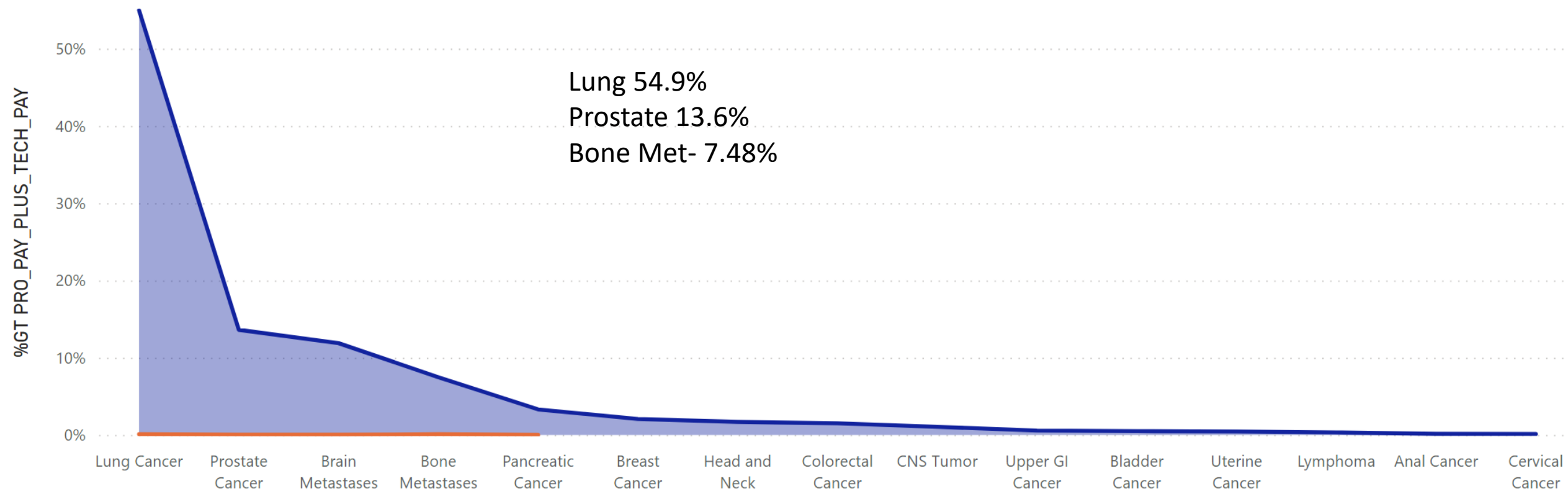
Value ● 1-10 services ● 11-20 services



Percent Pro Pay and Tech Pay SBRT - 2018

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

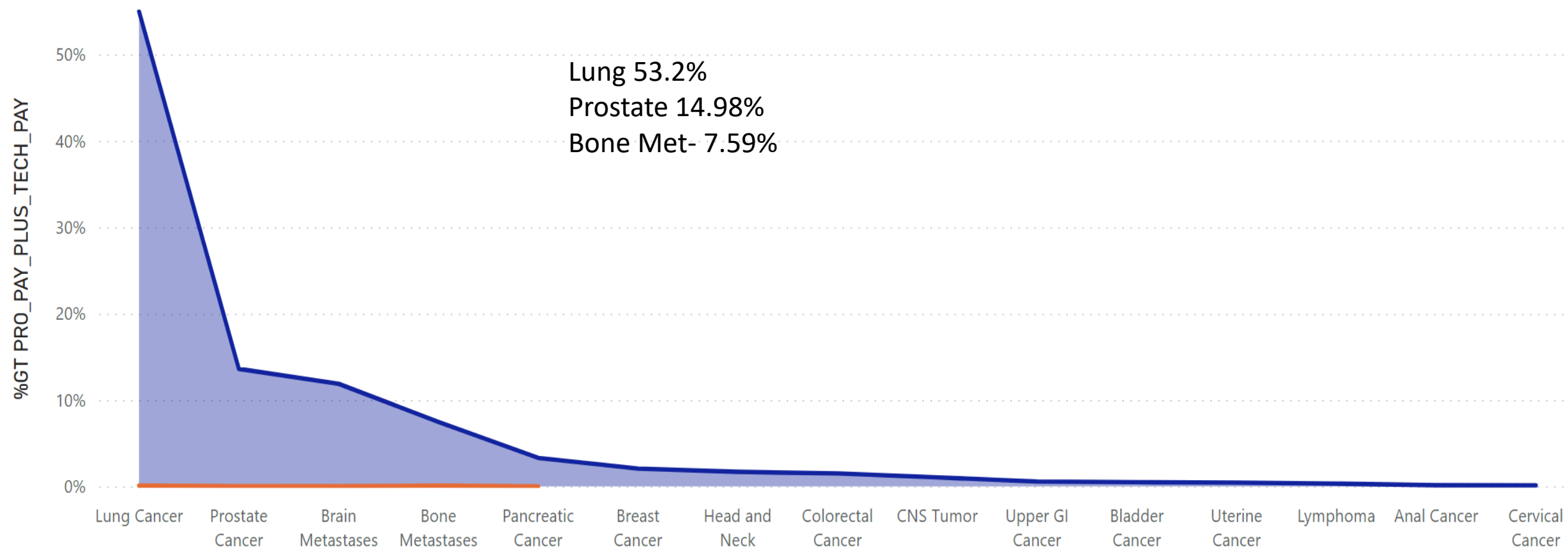
Value ● 1-10 services ● 11-20 services



Percent Pro Pay and Tech Pay SBRT - 2019

%GT PRO_PAY_PLUS_TECH_PAY by CANCER_TYPE and Value

Value ● 1-10 services ● 11-20 services



8

**PRO & TECH Pay by
modality, year, by disease
site, with all services
included**

SBRT

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Lung Cancer	\$122,104,192.41
+ Prostate Cancer	\$26,687,819.15
+ Brain Metastases	\$24,149,648.35
+ Bone Metastases	\$14,959,725.98
+ Pancreatic Cancer	\$6,778,783.20
+ Breast Cancer	\$3,366,807.27
+ Colorectal Cancer	\$3,223,694.85
+ Head and Neck Cancer	\$3,160,675.07
+ CNS Tumor	\$2,059,106.98
+ Uterine Cancer	\$1,080,416.74
+ Upper GI Cancer	\$1,040,529.26
+ Bladder Cancer	\$905,945.26
+ Lymphoma	\$801,319.29
+ Cervical Cancer	\$198,822.95
+ Anal Cancer	\$128,456.98
Total	\$210,645,943.74

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Lung Cancer	\$124,687,284.46
+ Prostate Cancer	\$30,876,284.15
+ Brain Metastases	\$26,956,715.62
+ Bone Metastases	\$16,964,253.02
+ Pancreatic Cancer	\$7,511,341.05
+ Breast Cancer	\$4,693,863.00
+ Head and Neck Cancer	\$3,844,445.49
+ Colorectal Cancer	\$3,425,734.66
+ CNS Tumor	\$2,391,214.54
+ Upper GI Cancer	\$1,285,871.09
+ Bladder Cancer	\$1,134,604.74
+ Uterine Cancer	\$1,014,331.19
+ Lymphoma	\$757,896.94
+ Anal Cancer	\$333,591.95
+ Cervical Cancer	\$310,765.53
Total	\$226,188,197.43

CANCER_TYPE	PRO_PAY_PLUS_TECH_PAY
+ Lung Cancer	\$135,882,837.30
+ Prostate Cancer	\$38,333,591.93
+ Brain Metastases	\$29,133,259.29
+ Bone Metastases	\$19,410,986.55
+ Pancreatic Cancer	\$9,259,111.71
+ Breast Cancer	\$5,645,587.34
+ Colorectal Cancer	\$4,513,870.43
+ Head and Neck Cancer	\$4,027,163.78
+ CNS Tumor	\$2,794,470.19
+ Upper GI Cancer	\$1,741,453.41
+ Uterine Cancer	\$1,481,228.22
+ Lymphoma	\$1,012,224.52
+ Bladder Cancer	\$950,051.05
+ Cervical Cancer	\$379,689.64
+ Anal Cancer	\$196,718.59
Total	\$254,762,243.95

CDEs and Reporting

- **CDEs** are reported biannually at the RO beneficiary level—by July 31 for RO episodes ending between January 1 and June 30 and by January 31 for RO episodes ending between July 1 and December 31.
- **Quality measure data** are reported at the TIN-NPI level, annually for all patients receiving RT services from Professional participants and Dual participants in the preceding calendar year, January 1 through December 31. Reporting is due by March 31 of the following calendar year.

Table 1. Required clinical data elements

	Breast	Prostate	Lung	Bone metastases	Brain metastases
RO Model identifier	✓	✓	✓	✓	✓
Medicare beneficiary identifier	✓	✓	✓	✓	✓
ECOG or KPS score	✓	✓	✓	✓	✓
AJCC TNM staging	✓	✓	✓		
Intent of treatment	✓	✓	✓		
Histology	✓		✓		
Laterality	✓				
ISUP Grade Group or Gleason score		✓			
Anatomic target ^a	✓	(opt.)	(opt.)		
Fractions ^a	✓	(opt.)	(opt.)		
Dose per fraction ^a	✓	(opt.)	(opt.)		
Total dose ^a	✓	(opt.)	(opt.)		
Prior RT to an overlapping area				✓	
Prior RT to brain					✓

Field	Min Leng	Max Leng	Description / Valid Values	Codebook Link	Format / Va	Example
rom_id	4	4	RO Model Practice Identification number.		####	1287
mbi	11	11	Medicare Beneficiary Identifier (MBI)	Link		1A02A08AA09
ajcc_t	2	13	Tumor	Link		
ajcc_n	2	13	Node	Link		
ajcc_m	2	13	Metastases	Link		
histo	1	1	Histology	Link	#	2
intent	1	1	Intent of treatment - palliative or curative	Link	#	2
lateral	1	1	Breast receiving treatment	Link	#	3
ecog	1	1	ECOG score on date closest to the start of the 90-day episode	Link	#	1
kps	1	3	KPS score on date closest to the start of the 90-day episode	Link	#, ##, ###	70
p1_anat	2	2	Primary anatomic target treated during phase I of radiation therapy	Link	##	40
p1_node	2	2	Draining lymph nodes, if any, treated during phase I of radiation therapy	Link	##	04
p1_dose	5	5	Dose per fraction delivered to the patient, in centigray (cGy), during Phase I		#####	500
p1_frac	3	3	Number of fractions delivered to the patient in the Phase I		###	15
p1_tot_dose*	6	6	Total radiation dose delivered to the patient in the Phase I, in centigray (cGy)		#####	6500
p2_anat	2	2	Primary anatomic target treated during phase II of radiation therapy	Link	##	
p2_node	2	2	Draining lymph nodes, if any, treated during phase II of radiation therapy	Link	##	
p2_dose	5	5	Dose per fraction delivered to the patient, in centigray (cGy), during Phase II		#####	500
p2_frac	3	3	Number of fractions delivered to the patient in the Phase II		###	15
p2_tot_dose*	6	6	Total radiation dose delivered to the patient in the Phase II, in centigray (cGy)		#####	6500
p3_anat	2	2	Primary anatomic target treated during phase III of radiation therapy	Link	##	
p3_node	2	2	Draining lymph nodes, if any, treated during phase III of radiation therapy	Link	##	
p3_dose	5	5	Dose per fraction delivered to the patient, in centigray (cGy), during Phase III		#####	500
p3_frac	3	3	Number of fractions delivered to the patient in the Phase III		###	15
p3_tot_dose*	6	6	Total radiation dose delivered to the patient in the Phase III, in centigray (cGy)		#####	6500

How to report

- The data does not all live in ARIA or Mosaiq
- This will likely be a manual process
- There are some BOTS that could be used
- Phase in approach
- Code tracking will be advisable

A low-angle, upward-looking perspective of several modern skyscrapers with glass facades. The buildings are dark and reflective, mirroring the sky and clouds. The sky is a deep blue-grey with scattered white clouds. The overall mood is professional and architectural.

Thank You