Evaluation of the Oncology Care Model

Supplemental Appendices

Performance Periods 1–9

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Exhibit SA-1: The Proportion of Episodes Triggered by Part D Chemotherapy Varied Similarly for OCM and Comparison Episodes

Measure	Baseline Period Episodes OCM N=345,881	PP1 Episodes OCM N=126,654	PP2 Episodes OCM N=128,238	PP3 Episodes OCM N=124,327	PP4 Episodes OCM N=132,814	PP5 Episodes OCM N=129,418	PP6 Episodes OCM N=137,418	PP7 Episodes[a] OCM N=128,781	PP8 Episodes[a] OCM N=131,209	PP9 Episodes[a] OCM N=129,045
Episodes triggered by Part D chemo	39.7%	41.5%	42.2%	41.6%	41.3%	41.4%	41.6%	40.6%	39.80%	41.2%
	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Episodes triggered by Part D chemo	39.7%	40.8%	40.6%	40.2%	39.70%	40.1%	40.0%	39.1%	38.2%	40.0%

Shading indicates statistically significant estimates at $p \le 0.01$, $p \le 0.05$, and $p \le 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: OCM: OCM intervention group. COMP: comparison group. PP: Performance period.
[a] Episodes include those with a COVID-19 diagnosis, which are excluded from the impact analyses.

Exhibit SA-2: The Proportion of Part D Episodes with Part D Chemotherapy Use Remained Stable in Both OCM and Comparison Episodes

Measure	Baseline Period Episodes OCM N=278,486	PP1 Episodes OCM N=104,328	PP2 Episodes OCM N=107,289	PP3 Episodes OCM N=103,279	PP4 Episodes OCM N=110,993	PP5 Episodes OCM N= 107,723	PP6 Episodes OCM N=115,123	PP7 Episodes[a] OCM N=107,401	PP8 Episodes[a] OCM N=109,653	PP9 Episodes[a] OCM N=108,042
Part D Episodes with Use of Part D Chemo	56.5%	57.6%	57.5%	57.5%	56.9%	57.3%	57.0%	56.9%	55.5%	56.9%
	COMP N=329,768	COMP N=120,533	COMP N=122,737	COMP N=116,024	COMP N=122,515	COMP N=117,424	COMP N=124,928	COMP N=113,019	COMP N=113,888	COMP N=112,956
Part D Episodes with Use of Part D Chemo	56.5%	56.8%	56.0%	56.1%	55.2%	55.8%	55.2%	55.2%	53.7%	55.3%

Shading indicates statistically significant estimates at $p \le 0.01$, $p \le 0.05$, and $p \le 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.
[a] Episodes include those with a COVID-19 diagnosis, which are excluded from the impact analyses.

Exhibit SA-3: Use of Novel Therapies Increased Similarly among OCM and Comparison Episodes; Cancer-specific Trends Varied

Proportion of Episodes with Novel Therapy Use	Baseline Period Episodes OCM N=345,881	PP1 Episodes OCM N=126,654	PP2 Episodes OCM N=128,238	PP3 Episodes OCM N=124,327	PP4 Episodes OCM N=132,814	PP5 Episodes OCM N=129,418	PP6 Episodes OCM N=137,418	PP7 Episodes[a] OCM N=128,781	PP8 Episodes[a] OCM N=131,209	PP9 Episodes[a] OCM N=129,045
Overall	**16.1%**	**12.1%**	**13.5%**	**17.6%**	**19.4%**	**20.7%**	**21.5%**	**23.5%**	**22.3%**	**20.6%**
Multiple Myeloma	55.1%	68.3%	70.1%	74.8%	77.7%	72.9%	75.0%	74.7%	46.3%	46.5%
Malignant Melanoma	43.0%	86.8%	88.9%	89.2%	90.6%	74.0%	87.8%	90.2%	88.9%	37.7%
High-Intensity Prostate Cancer	54.8%	0.0%	0.3%	22.7%	60.5%	65.6%	50.6%	48.8%	44.7%	47.4%
Lung Cancer	24.2%	35.8%	41.0%	48.0%	52.0%	63.7%	71.1%	71.5%	72.3%	70.5%
Kidney Cancer	13.1%	55.3%	58.7%	68.1%	71.3%	44.1%	44.9%	49.9%	52.2%	57.9%
High-Risk Bladder Cancer	0.0%	5.1%	15.9%	41.9%	47.3%	46.1%	35.1%	35.4%	37.8%	45.2%
Head and Neck Cancer	0.0%	19.6%	27.4%	27.8%	30.3%	31.7%	30.5%	25.7%	27.4%	30.0%
High-Risk Breast Cancer	14.6%	17.8%	19.7%	27.1%	21.7%	21.4%	19.6%	22.6%	22.7%	15.0%
Liver Cancer	0.0%	0.1%	3.4%	11.7%	19.2%	25.0%	28.8%	30.7%	30.9%	28.3%
Acute Leukemia	0.3%	0.0%	1.0%	2.4%	8.1%	19.8%	35.0%	40.8%	40.1%	38.4%
Ovarian Cancer	27.8%	0.4%	3.7%	8.7%	14.1%	20.7%	22.9%	21.6%	22.1%	20.4%
Gastro/Esophageal Cancer	5.7%	0.0%	0.9%	5.6%	9.7%	10.7%	13.6%	17.0%	19.7%	24.2%
Lymphoma	10.0%	9.7%	11.5%	13.3%	7.8%	9.7%	12.9%	15.7%	17.6%	14.1%
Chronic Leukemia	27.1%	2.1%	3.0%	5.4%	7.8%	7.9%	9.3%	15.7%	20.2%	22.2%
Female GU Cancer Other Than Ovary	10.4%	0.1%	1.2%	3.4%	5.7%	8.5%	9.7%	17.2%	24.6%	25.1%
Non-Reconciliation Eligible Cancer	18.7%	0.9%	1.2%	3.1%	5.1%	9.2%	11.9%	15.3%	18.1%	17.2%

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	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Overall	**15.8%**	**11.8%**	**13.1%**	**17.0%**	**19.4%**	**20.3%**	**21.1%**	**22.9%**	**22.0%**	**20.5%**
Multiple Myeloma	54.9%	67.8%	70.0%	75.4%	78.9%	74.3%	75.7%	76.3%	48.4%	47.8%
Malignant Melanoma	52.8%	88.7%	89.2%	91.5%	91.8%	73.9%	88.8%	89.4%	89.2%	45.4%
High-Intensity Prostate Cancer	56.9%	0.0%	0.4%	23.8%	61.0%	67.8%	53.2%	51.3%	47.6%	46.7%
Lung Cancer	26.2%	37.1%	41.5%	47.7%	55.5%	64.1%	68.5%	69.0%	71.1%	69.1%
Kidney Cancer	12.7%	50.3%	53.2%	64.4%	69.7%	43.2%	45.0%	48.0%	47.4%	57.0%
High-Risk Bladder Cancer	0.0%	8.2%	17.8%	40.1%	43.1%	39.1%	29.2%	31.7%	34.6%	43.4%
Head and Neck Cancer	0.0%	21.6%	28.4%	27.4%	28.0%	32.0%	32.3%	26.1%	29.3%	32.1%
High-Risk Breast Cancer	14.7%	18.4%	19.6%	26.3%	22.0%	21.4%	20.5%	22.8%	22.7%	15.3%
Liver Cancer	0.0%	0.3%	5.0%	13.2%	18.7%	21.0%	29.6%	29.8%	30.6%	29.6%
Acute Leukemia	0.5%	0.0%	1.0%	3.8%	7.0%	20.6%	35.4%	39.8%	43.1%	40.3%
Ovarian Cancer	28.4%	0.6%	4.3%	9.0%	14.9%	19.6%	22.7%	21.2%	22.3%	19.4%
Gastro/Esophageal Cancer	8.0%	0.1%	1.3%	6.4%	10.5%	12.4%	14.7%	18.1%	21.0%	25.1%
Lymphoma	11.0%	11.5%	12.9%	15.0%	8.3%	9.5%	12.4%	15.1%	16.7%	15.1%
Chronic Leukemia	27.1%	1.6%	2.3%	4.9%	6.5%	7.5%	9.7%	15.0%	19.8%	21.5%
Female GU Cancer Other Than Ovary	10.2%	0.0%	1.7%	4.5%	7.1%	8.7%	11.2%	19.4%	24.4%	25.4%
Non-Reconciliation Eligible Cancer	15.2%	1.2%	1.5%	3.5%	5.0%	9.5%	11.9%	15.9%	18.0%	17.5%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: Cancer types are limited to those with at least 10 percent of episodes using novel therapy in PP9. PP: Performance period.
[a] Episodes include those with a COVID-19 diagnosis, which are excluded from the impact analyses.

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Exhibit SA-4: The Overall Use of Immunotherapies Increased Similarly among OCM and Comparison Episodes; Cancer-specific Trends Varied Consistently among OCM and Comparison Episodes

Proportion of Episodes with Immunotherapy Use	Baseline Period Episodes OCM N=345,881	PP1 Episodes OCM N=126,654	PP2 Episodes OCM N=128,238	PP3 Episodes OCM N=124,327	PP4 Episodes OCM N=132,814	PP5 Episodes OCM N=129,418	PP6 Episodes OCM N=137,418	PP7 Episodes[a] OCM N=128,781	PP8 Episodes[a] OCM N=131,209	PP9 Episodes[a] OCM N=129,045
Overall	1.3%	5.4%	6.2%	7.7%	8.7%	10.6%	11.7%	12.8%	13.3%	13.5%
Malignant Melanoma	56.5%	80.3%	83.5%	83.0%	84.9%	85.8%	83.8%	86.7%	86.0%	84.2%
Kidney Cancer	9.9%	49.3%	47.5%	48.2%	47.2%	52.5%	56.5%	64.4%	66.3%	70.1%
High-Risk Bladder Cancer	0.9%	7.6%	16.2%	41.9%	47.3%	47.1%	45.7%	46.7%	50.4%	50.9%
Head and Neck Cancer	1.7%	20.9%	27.9%	28.2%	31.2%	32.5%	32.3%	39.0%	39.6%	40.7%
Liver Cancer	0.2%	1.5%	2.5%	11.3%	19.2%	23.7%	21.0%	22.8%	26.0%	31.8%
Non-Reconciliation Eligible Cancer	1.8%	8.2%	9.0%	11.1%	12.8%	12.9%	14.6%	18.3%	21.6%	21.6%
Gastro/ Esophageal Cancer	0.1%	1.1%	1.7%	6.4%	10.8%	12.0%	14.5%	17.3%	19.9%	24.2%
Anal Cancer	0.7%	1.9%	4.0%	6.8%	8.6%	11.2%	12.8%	11.8%	15.7%	15.9%
Female GU Cancer Other Than Ovary	0.3%	0.9%	2.2%	4.5%	6.4%	9.3%	10.6%	18.2%	25.6%	26.1%
Colorectal/Small Intestine Cancer	0.1%	0.8%	1.3%	2.7%	3.3%	4.3%	4.4%	4.8%	5.5%	7.2%
	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Overall	1.5%	5.4%	6.3%	7.8%	9.2%	10.5%	11.3%	12.4%	13.1%	13.2%
Malignant Melanoma	65.0%	82.6%	85.7%	86.0%	85.8%	86.7%	84.1%	85.2%	85.9%	84.8%
Kidney Cancer	8.8%	46.0%	43.3%	44.9%	45.8%	49.1%	54.9%	61.5%	64.6%	67.8%
High-Risk Bladder Cancer	0.7%	10.1%	18.1%	40.1%	43.1%	40.2%	40.5%	41.6%	44.4%	46.7%
Head and Neck Cancer	2.1%	23.2%	28.6%	27.7%	28.5%	32.4%	33.9%	37.3%	39.2%	40.6%
Liver Cancer	0.2%	2.0%	5.4%	13.5%	19.2%	19.0%	22.2%	22.6%	26.8%	32.0%

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Proportion of Episodes with Immunotherapy Use	Baseline Period Episodes OCM N=345,881	PP1 Episodes OCM N=126,654	PP2 Episodes OCM N=128,238	PP3 Episodes OCM N=124,327	PP4 Episodes OCM N=132,814	PP5 Episodes OCM N=129,418	PP6 Episodes OCM N=137,418	PP7 Episodes[a] OCM N=128,781	PP8 Episodes[a] OCM N=131,209	PP9 Episodes[a] OCM N=129,045
Non-Reconciliation Eligible Cancer	2.4%	8.1%	9.7%	12.3%	14.0%	14.5%	15.5%	20.5%	22.7%	23.2%
Gastro/ Esophageal Cancer	0.3%	1.6%	3.2%	8.2%	11.9%	13.4%	15.5%	18.3%	21.2%	25.2%
Anal Cancer	1.7%	3.5%	6.4%	9.5%	15.1%	13.7%	16.0%	17.6%	21.2%	20.9%
Female GU Cancer Other Than Ovary	0.5%	1.8%	2.6%	5.3%	8.2%	10.0%	12.4%	20.3%	25.7%	26.2%
Colorectal/Small Intestine Cancer	0.1%	0.8%	1.8%	2.6%	3.6%	4.5%	4.4%	5.1%	5.4%	7.0%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.

Notes: Cancer types are limited to those with at least 5 percent of episodes using immunotherapies in PP9. OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.
[a] Episodes include those with a COVID-19 diagnosis, which are excluded from the impact analyses.

Trends in Beneficiary Characteristics of Episodes

Exhibit SA-5: OCM Episodes were More Likely to be Female and Less Likely Dual Eligible; Similar Demographic Trends were Observed in OCM and Comparison Episodes

Demographic Category OCM	Baseline Period Episodes N=345,881	PP1 Episodes OCM N=126,654	PP2 Episodes OCM N=128,238	PP3 Episodes OCM N=124,327	PP4 Episodes OCM N=132,814	PP5 Episodes OCM N=129,418	PP6 Episodes OCM N=137,418	PP7 Episodes[a] OCM N=128,781	PP8 Episodes[a] OCM N=131,209	PP9 Episodes[a] OCM N=129,045
Gender										
Female	60.3%	60.2%	60.5%	60.1%	60.0%	59.3%	58.9%	58.5%	57.9%	58.6%
Age Bracket										
< 65	9.9%	9.5%	9.3%	8.8%	8.7%	8.4%	8.7%	8.4%	8.2%	7.8%
65-69	25.1%	25.4%	24.9%	24.6%	24.4%	24.2%	24.4%	24.2%	23.9%	23.9%
70-74	23.6%	23.9%	24.8%	25.2%	25.0%	25.0%	25.0%	25.0%	25.2%	25.5%
75-79	19.2%	19.4%	19.3%	19.6%	20.1%	20.3%	20.1%	20.3%	20.5%	20.5%
80-84	12.6%	12.5%	12.4%	12.7%	12.6%	12.9%	12.6%	12.9%	13.1%	13.3%
85+	9.5%	9.4%	9.2%	9.1%	9.2%	9.2%	9.2%	9.2%	9.2%	9.1%
Dual Eligibility										
Dual Eligible	14.4%	14.3%	14.3%	14.0%	13.6%	13.6%	13.3%	12.7%	12.0%	11.6%
COMP	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Gender										
Female	57.8%	57.7%	57.3%	57.2%	57.0%	56.7%	56.1%	55.7%	54.5%	55.6%
Age Bracket										
< 65	11.2%	10.7%	10.4%	10.0%	9.9%	9.5%	9.9%	9.5%	9.1%	8.9%
65-69	24.4%	24.9%	24.4%	24.2%	24.1%	23.8%	24.1%	23.8%	23.7%	23.6%
70-74	23.0%	23.2%	24.0%	24.5%	24.6%	24.7%	24.6%	24.7%	24.9%	25.0%
75-79	18.7%	19.0%	19.1%	19.1%	19.5%	19.9%	19.5%	19.9%	20.2%	20.1%
80-84	12.8%	12.6%	12.5%	12.6%	12.5%	12.7%	12.5%	12.7%	12.7%	12.8%
85+	9.9%	9.8%	9.6%	9.6%	9.4%	9.5%	9.4%	9.5%	9.4%	9.5%
Dual Eligibility										
Dual Eligible	16.8%	16.4%	16.0%	16.0%	15.5%	15.3%	14.6%	14.6%	13.8%	13.5%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading..

Source: Medicare claims 2014–2021; Medicare enrolment data 2014–2021.

Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

[a] Episodes include those with a COVID-19 diagnosis, which are excluded from the impact analyses.

Exhibit SA-6: The Mean HCC Risk Score Increased among Both OCM and Comparison Episodes

HCC Risk Score	Baseline Period Episodes OCM N=345,881	PP1 Episodes OCM N=126,654	PP2 Episodes OCM N=128,238	PP3 Episodes OCM N=124,327	PP4 Episodes OCM N=132,814	PP5 Episodes OCM N=129,418	PP6 Episodes OCM N=137,418	PP7 Episodes[a] OCM N=128,781	PP8 Episodes[a] OCM N=131,209	PP9 Episodes[a] OCM N=129,045
Median	2.337	2.619	2.569	2.672	2.658	2.791	2.726	2.925	2.925	2.848
Mean	2.664	2.801	2.792	2.846	2.839	2.908	2.880	2.968	2.962	2.918
Standard dev.	1.855	1.921	1.927	1.953	1.959	1.992	1.985	2.003	2.006	1.980
HCC Risk Score	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Median	2.356	2.729	2.711	2.837	2.862	2.925	2.799	2.94	2.937	2.902
Mean	2.665	2.835	2.827	2.890	2.899	2.939	2.884	2.982	2.972	2.912
Standard dev.	1.839	1.923	1.92	1.953	1.968	1.986	1.977	2.001	2.000	1.972

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021; Medicare enrolment data 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.
[a] Episodes include those with a COVID diagnosis, which are excluded from the impact analyses.

Trends in Cancer Mix

Exhibit SA-7: The Proportion of Episodes by Cancer Type Changed Similarly among OCM and Comparison Episodes

Proportion of Episodes by Cancer Type (ordered by frequency in baseline)	Baseline Period Episodes	PP1 Episodes	PP2 Episodes	PP3 Episodes	PP4 Episodes	PP5 Episodes	PP6 Episodes	PP7 Episodes[a]	PP8 Episodes[a]	PP9 Episodes[a]
	OCM N=345,881	OCM N=126,654	OCM N=128,238	OCM N=124,327	OCM N=132,814	OCM N=129,418	OCM N=137,418	OCM N=128,781	OCM N=131,209	OCM N=129,045
Low-Risk Breast Cancer	23.8%	24.1%	24.8%	24.4%	24.7%	24.0%	23.7%	22.2%	21.3%	22.7%
High-Risk Breast Cancer	10.6%	10.4%	10.2%	10.4%	10.1%	9.8%	9.5%	10.0%	10.0%	9.7%
Lung Cancer	9.3%	9.3%	9.2%	9.3%	9.1%	9.4%	9.7%	10.0%	9.7%	9.3%
Low-Intensity Prostate Cancer	8.3%	8.5%	8.5%	8.30%	8.6%	8.4%	8.6%	8.5%	8.4%	8.0%
Lymphoma	6.7%	6.3%	6.0%	5.9%	5.6%	5.6%	5.3%	5.3%	5.6%	5.4%
Colorectal Cancer	6.1%	5.4%	5.4%	5.1%	5.1%	4.9%	4.9%	4.9%	4.9%	4.6%
Multiple Myeloma	5.5%	5.9%	5.8%	6.2%	6.1%	6.3%	6.2%	6.5%	6.5%	6.4%
Non-Reconciliation Eligible Cancer	4.2%	4.6%	4.7%	4.7%	5.1%	5.6%	5.7%	5.3%	5.5%	5.5%
High-Intensity Prostate Cancer	3.8%	3.8%	3.5%	3.9%	4.0%	4.0%	4.0%	4.3%	4.4%	4.5%
Chronic Leukemia	3.4%	3.6%	3.7%	3.7%	3.0%	3.1%	3.1%	3.6%	3.8%	3.9%

Proportion of Episodes by Cancer Type (ordered by frequency in baseline)	Baseline Period Episodes	PP1 Episodes	PP2 Episodes	PP3 Episodes	PP4 Episodes	PP5 Episodes	PP6 Episodes	PP7 Episodes[a]	PP8 Episodes[a]	PP9 Episodes[a]
	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Low-Risk Breast Cancer	23.1%	22.6%	22.4%	22.3%	22.3%	21.9%	21.6%	20.2%	19.2%	20.8%
Low-Intensity Prostate Cancer	11.3%	11.2%	11.7%	11.2%	11.3%	11.1%	11.6%	11.4%	11.2%	10.9%
High-Risk Breast Cancer	9.5%	9.6%	9.2%	9.3%	9.0%	8.8%	8.6%	9.0%	9.0%	8.6%
Lung Cancer	8.8%	9.0%	9.0%	9.0%	9.1%	9.1%	9.2%	9.4%	9.2%	8.9%
Lymphoma	5.8%	5.5%	5.4%	5.3%	5.0%	5.0%	4.9%	5.0%	5.0%	4.9%
Colorectal Cancer	5.8%	5.2%	5.1%	4.9%	4.8%	4.7%	4.6%	4.7%	4.5%	4.3%
Multiple Myeloma	5.1%	5.5%	5.4%	5.7%	5.7%	5.9%	5.9%	6.2%	6.2%	5.9%

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Proportion of Episodes by Cancer Type (ordered by frequency in baseline)	Baseline Period Episodes	PP1 Episodes	PP2 Episodes	PP3 Episodes	PP4 Episodes	PP5 Episodes	PP6 Episodes	PP7 Episodes[a]	PP8 Episodes[a]	PP9 Episodes[a]
	COMP N=405,605	COMP N=145,234	COMP N=146,648	COMP N=138,790	COMP N=145,987	COMP N=140,333	COMP N=147,758	COMP N=134,361	COMP N=135,040	COMP N=133,527
Non-Reconciliation Eligible Cancer	4.9%	5.7%	5.8%	6.0%	6.6%	7.2%	6.9%	6.3%	6.7%	6.6%
High-Intensity Prostate Cancer	4.1%	3.9%	3.7%	4.1%	4.1%	4.1%	4.3%	4.7%	4.9%	5.0%
Chronic Leukemia	3.3%	3.4%	3.5%	3.5%	2.7%	2.7%	2.6%	3.4%	3.5%	3.6%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: Cancer types are limited to most common based on episode volume. OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

Trends in Characteristics of Practices

The number of OCM and comparison practices that contributed episodes declined over time, due to consolidation and organizational changes.[1] While OCM and comparison practices both grew in terms of the number of attributed episodes and number of clinicians, the growth in OCM providers slightly outpaced the growth in comparison practices. Among both OCM and comparison practices, there was a sharp increase in the share of advanced practice providers (APPs). The share of APPs in OCM practices continued to be higher than in comparison practices. Providers of other specialty types, including oncologist subspecialties and urologists, remained fairly stable over time for both OCM and comparison practices. Detailed results are found in **Exhibits A-36** to **A-41.**

Exhibit SA-8: The Number of OCM Practices with Attributed Episodes Declined Slightly over Time, While the Number of Comparison Practices Declined due to Consolidation and Attrition

Measure	Baseline Period Episodes	Intervention Period Episodes	PP1 Episodes	PP2 Episodes	PP3 Episodes	PP4 Episodes	PP5 Episodes	PP6 Episodes	PP7 Episodes	PP8 Episodes	PP9 Episodes
OCM											
Number of practices with attributed episodes	196	202	190	190	195	195	194	191	188	184	181
Comparison Group											
Number of practices with attributed episodes	534	522	518	504	490	477	473	460	441	426	418

Source: Medicare claims 2014–2021.
Notes: The number of OCM practices in the baseline period in this report differs from the practices included in the baseline in the Performance Period 1-3 Report. In PP4, two practices entered into pooling arrangements with existing OCM practices. We included these practices in the baseline sample as well as the intervention sample, once they joined the Model. Practice counts reflect an intention-to-treat approach, where terminated OCM practices remain in the sample as long as they continue to have attributed episodes. OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

Exhibit SA-9: Practice Size (Number of NPIs and Number of Episodes) Increased between the Baseline and Intervention Periods among OCM and Comparison Practices

Statistic	Baseline Period Episodes OCM N=196	PP1 Episodes OCM N=190	PP2 Episodes OCM N=190	PP3 Episodes OCM N=195	PP4 Episodes OCM N=195	PP5 Episodes OCM N=194	PP6 Episodes OCM N=191	PP7 Episodes OCM N=188	PP8 Episodes OCM N=184	PP9 Episodes OCM N=181
Number of NPIs										
Median	18	23	22	23	22	22	28	29	27	29
Mean	36	41.22	42.24	41.98	44.37	45.8	48.47	48.26	48.80	50.75
Std dev	53	60	62	63	66	68	72	70	70	73
Number of Episodes										
Median	329	396	397	391	414	414	465	427	437	446
Mean	588	667	675	638	681	667	719	685	713	713
Std dev	1175	1311	1340	1263	1315	1289	1351	1305	1342	1328

Statistic	COMP N=534	COMP N=518	COMP N=504	COMP N=490	COMP N=477	COMP N=473	COMP N=460	COMP N=441	COMP N=426	COMP N=418
Number of NPIs										
Median	9	10	10	10	11	11	12	12	13	15
Mean	20.41	22.81	24.28	24.95	26.77	26.88	28.67	28.76	29.07	30.38
Std dev	31	37	39	41	43	43	46	46	46	48
Number of Episodes[a]										
Median	158	172	185	173	185	183	187	179	183	176
Mean	253	280	291	283	306	297	321	305	317	319
Std dev	296	349	362	361	389	385	424	402	409	425

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims and administrative files 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

Exhibit SA-10: The Share of APPs Grew in Both OCM and Comparison Practices

Share of Clinicians by Specialty Type	Baseline Period Episodes OCM N=196	PP1 Episodes OCM N=190	PP2 Episodes OCM N=190	PP3 Episodes OCM N=195	PP4 Episodes OCM N=195	PP5 Episodes OCM N=194	PP6 Episodes OCM N=191	PP7 Episodes OCM N=188	PP8 Episodes OCM N=184	PP9 Episodes OCM N=181
Oncologists	63.7%	62.1%	61.6%	61.4%	60.0%	60.1%	59.0%	59.2%	58.2%	57.1%
APPs	12.4%	14.5%	15.8%	16.8%	17.2%	17.3%	18.8%	19.0%	20.3%	20.8%
Urologists	4.5%	4.4%	4.6%	4.4%	4.6%	4.3%	4.0%	4.0%	3.9%	4.0%
Hematology Onc./Medical Onc.	81.8%	82.4%	82.6%	82.1%	81.9%	82.1%	81.7%	81.6%	81.4%	80.9%
Surgical Onc.	2.7%	2.6%	2.5%	2.5%	2.7%	2.7%	3.0%	3.0%	3.0%	3.3%
Radiation Onc.	11.0%	11.1%	11.0%	11.5%	11.3%	10.9%	10.8%	11.0%	11.4%	11.4%
Gynecologic Onc.	4.0%	3.8%	3.9%	3.9%	4.1%	4.4%	4.4%	4.4%	4.2%	4.4%

Specialty Type	COMP N=534	COMP N=518	COMP N=504	COMP N=490	COMP N=477	COMP N=473	COMP N=460	COMP N=441	COMP N=426	COMP N=418
Oncologists	62.1%	61.2%	60.3%	60.9%	58.9%	58.7%	56.2%	56.7%	56.2%	55.7%
APPs	10.0%	11.1%	12.0%	12.0%	13.1%	13.8%	14.6%	14.6%	15.1%	15.6%
Urologists	6.5%	6.5%	6.5%	6.6%	6.3%	6.2%	6.1%	6.2%	6.5%	6.4%
Hematology Onc./Medical Onc.	82.9%	82.8%	82.0%	82.2%	81.3%	81.6%	80.0%	79.8%	79.9%	79.0%
Surgical Onc.	2.0%	2.0%	2.1%	2.2%	2.3%	2.2%	2.3%	2.4%	2.2%	2.4%
Radiation Onc.	11.2%	11.6%	12.2%	12.1%	12.5%	12.6%	13.2%	13.7%	13.6%	14.1%
Gynecologic Onc.	3.7%	3.2%	3.6%	3.4%	3.3%	3.6%	3.5%	3.6%	3.7%	3.9%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021; Provider Enrollment, Chain, and Ownership System (PECOS) and NPPES 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

Exhibit SA-11: The Proportion of Oncology-Only Specialty Practices Decreased Slightly, Although Statistically Insignificant, in Both OCM and Comparison Practices over Time

Metric	Baseline Period Episodes OCM N=196	PP1 Episodes OCM N=190	PP2 Episodes OCM N=190	PP3 Episodes OCM N=195	PP4 Episodes OCM N=195	PP5 Episodes OCM N=194	PP6 Episodes OCM N=191	PP7 Episodes OCM N=188	PP8 Episodes OCM N=184	PP9 Episodes OCM N=181
% of onc-specialty practices	33.7%	35.3%	34.7%	34.9%	33.8%	32.5%	33.0%	31.4%	31.5%	30.4%
Metric	COMP N=534	COMP N=518	COMP N=504	COMP N=490	COMP N=477	COMP N=473	COMP N=460	COMP N=441	COMP N=426	COMP N=418
% of onc-specialty practices	42.5%	44.2%	43.8%	44.5%	43.0%	43.6%	40.7%	39.5%	39.9%	38.0%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021; PECOS and NPPES 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

Exhibit SA-12: Affiliation with an Academic Medical Center Increased between the Baseline and Later PPs

Metric	Baseline Period Episodes OCM N=196	PP1 Episodes OCM N=190	PP2 Episodes OCM N=190	PP3 Episodes OCM N=195	PP4 Episodes OCM N=195	PP5 Episodes OCM N=194	PP6 Episodes OCM N=191	PP7 Episodes OCM N=188	PP8 Episodes OCM N=184	PP9 Episodes OCM N=181
Proportion affiliated with academic med center	15.8%	15.8%	15.8%	15.9%	17.4%	18.0%	18.3%	18.6%	19.0%	19.3%
Metric	COMP N=534	COMP N=518	COMP N=504	COMP N=490	COMP N=477	COMP N=473	COMP N=460	COMP N=441	COMP N=426	COMP N=418
Proportion affiliated with academic med center	8.6%	8.7%	8.9%	9.2%	10.5%	10.6%	11.1%	11.6%	11.7%	12.0%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021; Welch and Bindman, 2016; updated through 2020 based on various websites of medical school oncology/hematology departments, divisions, and institutes.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

Exhibit SA-13: Ownership by a Hospital or Affiliation with Health System Increased Similarly among OCM and Comparison Practices

Metric	Baseline Period Episodes OCM N=191	PP1 Episodes OCM N=190	PP2 Episodes OCM N=190	PP3 Episodes OCM N=195	PP4 Episodes OCM N=195	PP5 Episodes OCM N=193	PP6 Episodes OCM N=189	PP7 Episodes OCM N=186	PP8 Episodes OCM N=182	PP9 Episodes OCM N=179
Proportion of practices owned by a hospital or affiliated with a health system	44.0%	50.0%	48.4%	47.7%	48.2%	48.2%	48.7%	49.5%	50.0%	50.8%

Metric	COMP N=530	COMP N=510	COMP N=498	COMP N=483	COMP N=471	COMP N=465	COMP N=453	COMP N=432	COMP N=417	COMP N=408
Proportion of practices owned by a hospital or affiliated with a health system	54.5%	59.6%	57.60%	60.5%	60.7%	61.5%	62.3%	61.8%	62.1%	62.5%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021; 2015–2019 SK&A Office-Based Physician Files.
Notes: OCM: OCM intervention group. COMP: Comparison group. PP: Performance period.

SB. Payment and Utilization Outcome Analyses

SB.1 Payment Outcomes

Impact on Total Episode Payments and Payment Components

Exhibit SB-1: Part A Payments Declined Slightly More for OCM Episodes than for Comparison Episodes

Measure	% of Part A Payments	OCM N=1,502,665		COMP N=1,662,849		DID	PP9		Percent Change
		Baseline Mean	Int. Mean	Baseline Mean	Int. Mean		90% LCL	90% UCL	
All Part A Payments	100%	$6,165	$5,781	$6,008	$5,776	-$152	-$257	-$47	-2.5%
ACH payments	65.0%	$4,010	$3,876	$3,754	$3,594	$25	-$51	$102	0.6%
SNF payments	10.8%	$668	$574	$625	$549	-$19	-$40	$3	-2.8%
HHA payments	11.1%	$687	$581	$663	$583	-$26	-$55	$3	-3.8%
Hospice payments	7.7%	$472	$447	$430	$414	-$9	-$24	$6	-2.0%
IRF payments	3.5%	$218	$241	$193	$210	$6	-$6	$18	2.8%
LTCH payments	2.0%	$122	$81	$117	$77	-$0	-$20	$19	-0.4%
OIP payments	-0.2%	-$12	-$17	$227	$351	-$129	-$217	-$42	1057%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: ACH: Acute care hospital. SNF: Skilled nursing facility. HHA: Home health agency. IRF: Inpatient rehabilitation facility. LTCH: Long-term care hospital. OIP: Other inpatient facility. OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit.

Exhibit SB-2: OCM had No Overall Impact on Part D Payments

Measure	OCM N=1,242,884		COMP N=1,384,853		Impact Estimates Through PP9			
	Baseline Mean	Int Mean	Baseline Mean	Int Mean	DID	90% LCL	90% UCL	Percent Change
Part D payments [a]	$6,769	$10,079	$6,816	$10,151	-$25	-$178	$129	-0.4%
Part D gross drugs costs [b]	$10,576	$14,905	$10,651	$15,052	-$71	-$263	$121	-0.7%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: [a] Part D payments are calculated as the sum of low-income cost-sharing and reinsurance amounts paid by Medicare, as reflected on the PDE. [b] Part D gross drugs costs are calculated as the sum of ingredient cost, dispensing fee, vaccine administration fee, and sales tax, as shown on the PDE, reflecting the total spending on the prescription fill from all parties. OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit.

Exhibit SB-3: Impact on Part D Payments by Performance Periods

Measure	Period-by-Period Impact Estimates N=2,627,737								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Part D payments [a]	$97	$69	$34	$127	-$64	$38	-$47	-$211	-$284
Part D gross drugs costs [b]	$101	$121	$28	$163	-$113	-$6	-$166	-$344	-$449

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: [a] Part D payments are calculated as the sum of low-income cost-sharing and reinsurance amounts paid by Medicare, as reflected on the PDE. [b] Part D gross drugs costs are calculated as the sum of ingredient cost, dispensing fee, vaccine administration fee, and sales tax, as shown on the PDE, reflecting the total spending on the prescription fill from all parties. PP: Performance period. DID: Difference-in-differences.

Exhibit SB-4: OCM Reduced TEP for Higher-Risk Episodes and for Several Individual Cancers

TEP	OCM N=1,502,665			COMP N=1,662,849			Impact Estimates Through PP9			
	Number of Episodes	Baseline Mean	Int. Mean	Number of Episodes	Baseline Mean	Int. Mean	DID	90% LCL	90% UCL	Percent Change
Episode Risk Group										
Lower-risk episodes	491,690	$7,291	$7,548	571,501	$7,362	$7,547	$72	-$42	$187	1.0%
Higher-risk episodes	1,010,975	$40,266	$49,673	1,091,348	$39,584	$49,747	-$755	-$1,140	-$371	-1.9%
Cancer Type										
Low-Risk Breast Cancer	355,083	$5,376	$5,502	364,581	$5,432	$5,557	$2	-$96	$99	0.0%
Low-Intensity Prostate Cancer	126,185	$11,412	$11,956	188,159	$11,325	$11,803	$65	-$203	$333	0.6%
High-Risk Breast Cancer	152,752	$35,885	$42,609	151,896	$34,695	$42,585	-$1,166	-$1,664	-$668	-3.2%
Lung Cancer	141,563	$39,871	$56,316	149,973	$39,135	$56,672	-$1,092	-$1,668	-$516	-2.7%
Lymphoma	88,461	$44,662	$50,333	87,691	$45,162	$52,365	-$1,531	-$2,537	-$525	-3.4%
Colorectal/Small Intestine Cancer	79,303	$35,911	$36,555	83,292	$34,668	$36,603	-$1,290	-$2,072	-$508	-3.6%
Multiple Myeloma	90,605	$54,448	$76,230	93,745	$53,938	$76,172	-$452	-$1,664	$760	-0.8%
Non-Reconciliation Eligible Cancers	74,515	$37,253	$48,220	100,827	$35,267	$46,388	-$153	-$1,057	$750	-0.4%
High-Intensity Prostate Cancer	59,838	$42,013	$45,682	70,448	$41,656	$45,851	-$527	-$1,395	$341	-1.3%
Chronic Leukemia	52,000	$44,630	$51,451	53,731	$44,427	$50,916	$332	-$521	$1,184	0.7%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: TEP: Total Episode Payments. OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit.

Exhibit SB-5: OCM Reduced TEP for Higher-Risk Episodes and for Several Individual Cancers, Impact Varied by Performance Period

TEP	Period-by-Period Impact Estimates N= 3,165,514								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Episode Risk Group									
Lower-risk episodes	$88	$216	$212	$162	$61	$48	$91	-$197	-$68
Higher-risk episodes	-$101	-$512	-$573	-$587	-$546	-$408	-$1,045	-$1,684	-$1,326
Cancer Type									
Low-Risk Breast Cancer	$23	$119	$160	$102	-$19	-$193	$83	-$183	-$97
Low-Intensity Prostate Cancer	$128	$385	$169	$265	$91	$313	-$68	-$487	-$277
High-Risk Breast Cancer	-$742	-$606	-$590	-$1,126	-$823	-$1,476	-$1,521	-$1,855	-$1,826
Lung Cancer	-$586	-$1,033	-$1,173	-$1,422	-$1,882	-$340	-$0	-$1,880	-$1,665
Lymphoma	-$518	-$417	-$1,145	-$1,153	-$1,429	-$435	-$3,144	-$3,858	-$2,075
Colorectal/Small Intestine Cancer	-$449	-$592	-$1,575	-$964	-$1,244	-$724	-$1,946	-$2,287	-$2,134
Multiple Myeloma	$676	-$416	$20	$537	$69	-$649	-$1,808	-$1,880	-$434
Non-Reconciliation Eligible Cancers	-$239	$707	-$130	$219	$113	$675	-$1,169	-$839	-$762
High-Intensity Prostate Cancer	$379	-$221	-$263	-$1,027	-$437	-$228	-$576	-$1,405	-$746
Chronic Leukemia	-$141	-$599	$83	$900	$1,854	$1,415	$1,224	$61	-$1,418

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: TEP: Total Episode Payments. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit.

Exhibit SB-6: OCM Reduced Part A Payments for Higher-Risk Episodes, but had No Impact on Episodes for Most of the Individual Cancers apart from Lung Cancer

Part A Payments	OCM N=1,502,665			COMP N=1,662,849			Impact Estimates Through PP9			
	Number of Episodes	Baseline Mean	Int. Mean	Number of Episodes	Baseline Mean	Int. Mean	DID	90% LCL	90% UCL	Percent Change
Episode Risk Group										
Lower-risk episodes	491,690	$2,290	$2,129	571,501	$2,213	$2,038	$13	-$65	$91	0.6%
Higher-risk episodes	1,010,975	$8,087	$7,636	1,091,348	$7,883	$7,678	-$245	-$385	-$106	-3.0%
Cancer Type										
Low-Risk Breast Cancer	355,083	$1,669	$1,557	364,581	$1,630	$1,526	-$8	-$76	$60	-0.5%
Low-Intensity Prostate Cancer	126,185	$3,588	$3,277	188,159	$3,405	$3,058	$36	-$135	$207	1.0%
High-Risk Breast Cancer	152,752	$5,038	$4,572	151,896	$4,966	$4,511	-$12	-$181	$157	-0.2%
Lung Cancer	141,563	$9,372	$8,709	149,973	$9,082	$8,669	-$250	-$479	-$21	-2.7%
Lymphoma	88,461	$8,000	$7,762	87,691	$7,950	$8,272	-$560	-$1,155	$35	-7.0%
Multiple Myeloma	90,605	$7,799	$6,746	93,745	$7,836	$7,026	-$242	-$654	$170	-3.1%
Non-Reconciliation Eligible Cancers	74,515	$7,491	$7,119	100,827	$7,159	$6,993	-$206	-$572	$160	-2.7%
High-Intensity Prostate Cancer	59,838	$6,415	$5,520	70,448	$5,907	$5,264	-$252	-$606	$102	-3.9%
Chronic Leukemia	52,000	$5,218	$4,751	53,731	$5,379	$4,629	$282	-$73	$638	5.4%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: OCM: OCM intervention group; COMP: Comparison group. Int.: Intervention period. PP=Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit. Colorectal cancer/small intestine is not included in this table because the Part A payments impact estimate could not be reliably reported due to failure of the parallel trend assumption.

Exhibit SB-7: OCM Reduced Part A Payments for Higher-Risk Episodes, Impact Varied by Performance Period

Part A Payments	Period-by-Period Impact Estimates N= 3,165,514								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Episode Risk Group									
Lower-risk episodes	$59	$186	$197	$151	$57	$26	$79	-$213	-$79
Higher-risk episodes	-$180	-$555	-$612	-$660	-$434	-$365	-$887	-$1,277	-$857
Low-Risk Breast Cancer	-$14	$98	$120	$48	-$79	-$150	$81	-$113	-$69
Low-Intensity Prostate Cancer	$49	$24	$205	$15	$239	$20	$8	-$247	$19
High-Risk Breast Cancer	$143	-$24	$219	-$8	$99	-$23	-$158	-$375	$17
Lung Cancer	-$103	-$49	-$388	-$241	-$437	$48	-$338	-$605	-$145
Lymphoma	-$319	-$162	-$755	-$314	-$230	-$107	-$1,451	-$1,430	-$380
Multiple Myeloma	-$156	-$394	-$517	-$132	-$357	-$254	-$375	-$9	$6
Non-Reconciliation Eligible Cancers	-$503	$136	-$745	-$95	-$366	$74	-$524	-$219	$293
High-Intensity Prostate Cancer	-$37	-$73	-$129	-$884	-$154	$222	-$467	-$295	-$386
Chronic Leukemia	-$189	$275	$239	$446	$607	-$109	$420	$425	$448

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: PP=Performance period. DID: Difference-in-differences. Colorectal cancer/small intestine is not included in this table because the Part A payments impact estimate could not be reliably reported due to failure of the parallel trend assumption.

Exhibit SB-8: OCM Reduced Part B Payments for Higher-Risk Episodes, Impact Varied by Cancer Type and Performance Period

Part B Payments	Period-by-Period Impact Estimates N= 3,165,514								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Episode Risk Group									
Lower-risk episodes	$41	$123	$48	$134	$41	$98	$24	-$92	-$67
Higher-risk episodes	-$84	-$329	-$272	-$432	-$289	-$312	-$365	-$762	-$779
Cancer Type									
Low-Risk Breast Cancer	-$7	-$12	$19	$17	$34	-$69	-$28	-$76	-$48
Low-Intensity Prostate Cancer	$67	$324	-$36	$284	-$88	$282	-$49	-$258	-$272
High-Risk Breast Cancer	-$832	-$615	-$644	-$978	-$660	-$1,374	-$1,155	-$1,365	-$1,343
Lung Cancer	-$300	-$737	-$714	-$1,058	-$1,266	-$95	$614	-$804	-$864
Lymphoma	$139	-$105	-$258	-$872	-$441	$295	-$993	-$1,594	-$1,134
Colorectal/Small Intestine Cancer	-$386	-$727	-$1,191	-$850	-$1,134	-$1,222	-$1,227	-$1,763	-$1,716
Multiple Myeloma	$56	-$318	$95	$3	-$35	-$548	-$1,433	-$1,134	$322
High-Intensity Prostate Cancer	-$282	-$1,291	-$589	-$826	-$620	-$750	-$498	-$933	-$1,399
Chronic Leukemia	-$67	-$261	$186	$64	$670	$3	$44	-$93	-$912

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: PP: Performance period. DID: Difference-in-differences. Non-reconciliation eligible cancers are not included in this table because the Part B payments impact estimate could not be reliably reported due to failure of the baseline parallel trends assumption.

Exhibit SB-9: OCM Increased Part D Payments for High-Intensity Prostate Cancer but had No Impact on Episodes for Other Individual Cancers

Part D Payments [a]	OCM N=1,242,884			COMP N=1,384,853			Impact Estimates Through PP9			
	Number of Episodes	Baseline Mean	Int. Mean	Number of Episodes	Baseline Mean	Int. Mean	DID	90% LCL	90% UCL	Percent Change
Episode Risk Group										
Lower-risk cancer types	444,541	$523	$575	503,228	$543	$576	$18	-$18	$55	3.5%
Higher-risk cancer types	798,343	$10,648	$15,521	881,625	$10,510	$15,432	-$49	-$266	$168	-0.5%
Cancer Type										
Low-Risk Breast Cancer	354,014	$548	$594	363,522	$579	$597	$28	-$15	$70	5.0%
Low-Intensity Prostate Cancer	82,975	$444	$535	126,664	$415	$520	-$13	-$78	$51	-3.0%
High-Risk Breast Cancer	121,538	$7,465	$12,961	123,366	$7,058	$12,641	-$87	-$413	$239	-1.2%
Lung Cancer	106,236	$4,043	$6,670	115,352	$4,041	$6,957	-$289	-$764	$185	-7.2%
Lymphoma	66,215	$7,164	$8,805	67,402	$7,193	$9,336	-$503	-$1,008	$2	-7.0%
Colorectal/Small Intestine Cancer	58,262	$2,619	$3,130	63,184	$2,499	$2,926	$85	-$144	$314	3.2%
Multiple Myeloma	76,740	$27,877	$46,164	80,623	$27,841	$45,775	$353	-$394	$1,101	1.3%
Non-Reconciliation Eligible Cancers	62,238	$14,748	$20,252	84,668	$13,716	$18,950	$268	-$363	$900	1.8%
High-Intensity Prostate Cancer	53,122	$19,713	$24,007	63,330	$20,486	$24,156	$623	$57	$1,189	3.2%
Chronic Leukemia	47,897	$28,988	$36,066	49,987	$28,623	$35,569	$132	-$681	$944	0.5%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: [a] Part D payments are calculated as the sum of low-income cost-sharing and reinsurance amounts, as reflected on the PDE. OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit.

Exhibit SB-10: Impact on Part D Payments for Subgroups by Performance Periods

Part D Payments [a]	Period-by-Period Impact Estimates N= 2,627,737								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Episode Risk Group									
Lower-risk episodes	$34	$34	$14	$12	$1	$24	$14	$17	$12
Higher-risk episodes	$119	$113	$109	$206	-$80	$55	-$110	-$382	-$455
Cancer Type									
Low-Risk Breast Cancer	$43	$34	$22	$36	$25	$26	$31	$7	$21
Low-Intensity Prostate Cancer	$16	$51	-$10	-$50	-$95	$13	-$39	$28	-$39
High-Risk Breast Cancer	-$16	$111	-$111	-$17	-$221	$23	-$145	-$12	-$432
Lung Cancer	-$219	-$272	-$65	-$93	-$199	-$286	-$248	-$511	-$719
Lymphoma	-$424	-$128	-$122	$62	-$933	-$700	-$803	-$884	-$655
Colorectal/Small Intestine Cancer	$164	$501	$69	$228	-$32	-$130	$1	-$36	-$60
Multiple Myeloma	$905	$391	$593	$981	$651	$450	$248	-$496	-$514
Non-Reconciliation Eligible Cancers	$349	$652	$711	$917	$382	$267	-$43	-$25	-$702
High-Intensity Prostate Cancer	$920	$1,251	$489	$834	$466	$359	$487	-$147	$1,130
Chronic Leukemia	$103	-$659	-$371	$410	$641	$1,605	$829	-$267	-$867

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: [a] Part D payments are calculated as the sum of low-income cost-sharing and reinsurance amounts, as reflected on the PDE. PP: Performance period. DID: Difference-in-differences.

Impact on Chemotherapy and Non-Chemotherapy Drug Payments

Exhibit SB-11: OCM had No Overall Impact on Payments Related to Part B Chemotherapy but Reduced Non-Chemotherapy Payments

| Measure | OCM N=1,502,665 | | COMP N=1,662,849 | | Impact Estimates Through PP9 | | | |
	Baseline Mean	Int. Mean	Baseline Mean	Int. Mean	DID	90% LCL	90% UCL	Percent Change
Part B non-chemo payments	$2,699	$2,688	$2,463	$2,703	-$251	-$330	-$173	-9.3%
Part B chemo drug payments	$7,696	$11,664	$7,536	$11,464	$41	-$103	$184	0.5%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit.

Exhibit SB-12: Impact on Chemotherapy and Non-Chemotherapy Drug Payments by Performance Periods

| Measure | Period-by-Period Impact Estimates N= 3,165,514 | | | | | | | | |
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Part B non-chemo payments	-$87	-$118	-$161	-$159	-$209	-$237	-$381	-$451	-$469
Part B chemo drug payments	$51	-$64	$51	-$74	$2	$90	$200	$68	$44

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: PP: Performance period. DID: Difference-in-differences.

Exhibit SB-13: Impact on Part B Non-Chemotherapy Payments for Subgroups by Performance Periods

Part B Non-Chemo Payments	Period-by-Period Impact Estimates N= 3,165,514								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Episode Risk Group									
Lower-Risk Episodes	$6	$77	-$17	$49	-$31	$11	-$53	-$65	-$47
Higher-Risk Episodes	-$131	-$223	-$238	-$266	-$296	-$359	-$537	-$630	-$670
Cancer Type									
Low-Risk Breast Cancer	$9	$1	$28	$24	-$6	-$19	-$10	-$30	$4
Low-Intensity Prostate Cancer	-$43	$228	-$111	$114	-$61	$102	-$113	-$99	-$107
High-Risk Breast Cancer	-$201	-$248	-$224	-$178	-$349	-$525	-$659	-$717	-$707
Lung Cancer	-$106	-$228	-$320	-$198	-$393	-$530	-$553	-$718	-$883
Lymphoma	$147	$169	$99	$233	$234	$531	-$358	-$565	-$411
Colorectal/Small Intestine Cancer	-$17	-$213	-$571	-$752	-$858	-$1,059	-$872	-$991	-$1,238
Multiple Myeloma	-$38	-$33	-$116	-$127	-$114	-$63	-$371	-$382	-$354
Non-Reconciliation Eligible Cancers	-$301	-$328	-$148	-$300	-$61	-$263	-$515	-$614	-$496
High-Intensity Prostate Cancer	-$37	-$345	-$144	-$687	-$491	-$694	-$651	-$715	-$1,065
Chronic Leukemia	$168	$47	$52	$77	$234	$53	-$40	-$157	-$425

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: There were 121,793-137,418 OCM episodes per PP and 126,603-147,758 Comparison group episodes per PP. PP: Performance period. DID: Difference-in-differences.

SB.2 Utilization Outcome

Exhibit SB-14: Occurrence of ED Visits Not Resulting in an Inpatient Stay Performance Period Results for Chronic Leukemia

Subgroup	Period-by-Period Impact Estimates								
	PP1 DID	PP2 DID	PP3 DID	PP4 DID	PP5 DID	PP6 DID	PP7 DID	PP8 DID	PP9 DID
Cancer Type									
Chronic Leukemia	1.4pp	3.1pp	1.3pp	1.4pp	1.8pp	1.5pp	1.6pp	1.3pp	1.3pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: pp: percentage points. PP: Performance period. DID: Difference-in-difference

Exhibit SB-15: Relative Reductions in Number of 60-day Home Health Spells Driven by Low-Intensity Prostate Cancer

Subgroup	Number of Episodes		OCM		COMP		Impact Estimates Through PP9			
	OCM	COMP	Baseline Mean	Int Mean	Baseline Mean	Int Mean	DID	90% LCL	90% UCL	Percent Change
Cancer Type										
Low-Risk Breast Cancer	21,680	20,696	1.903	1.933	1.858	1.943	-0.055	-0.113	0.003	-2.9%
High-Risk Breast Cancer	22,622	21,226	1.911	1.998	1.855	1.989	-0.047	-0.100	0.006	-2.5%
Low-Intensity Prostate Cancer	12,523	16,480	1.891	1.989	1.827	1.995	-0.069	-0.125	-0.014	-3.7%
Lung Cancer	32,151	31,286	1.779	1.912	1.782	1.932	-0.016	-0.056	0.024	-0.9%
Lymphoma	13,368	12,522	1.872	2.033	1.853	1.996	0.018	-0.035	0.072	1.0%
Colorectal/Small Intestine Cancer	17,590	17,672	2.059	2.145	2.060	2.142	0.004	-0.064	0.072	0.2%
Multiple Myeloma	14,001	13,222	1.870	1.973	1.865	2.006	-0.038	-0.098	0.021	-2.0%
Non-Reconciliation Eligible Cancers	12,967	16,479	1.853	2.016	1.826	1.995	-0.006	-0.064	0.052	-0.3%
High-Intensity Prostate Cancer	9,536	9,821	1.873	2.002	1.922	1.987	0.064	-0.002	0.131	3.4%
Chronic Leukemia	5,952	5,603	1.914	2.058	1.932	1.982	0.095	0.002	0.187	4.9%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. Pp = percentage points. PP: Performance period. DID: Difference-in-difference. LCL: Lower confidence limit. UCL: Upper confidence limit. Intensity (Number of Visits or Stays) measures are conditional on observing any use of measure and less than the 99.9 percentile.

Exhibit SB-16: OCM had small (but statistically significant) Reduction in Number of Cancer E&M Related Services for Low-Intensity Prostate Cancer

| Subgroup	Number of Episodes		OCM		COMP		Impact Estimates Through PP9			
	OCM	COMP	Baseline Mean	Int. Mean	Baseline Mean	Int. Mean	DID	90% LCL	90% UCL	Percent Change
Cancer Type										
Low-Risk Breast Cancer	354,780	364,284	1.837	1.767	1.852	1.768	0.014	-0.011	0.039	0.8%
High-Risk Breast Cancer	152,613	151,769	6.931	6.546	6.705	6.263	0.057	-0.117	0.231	0.8%
Low-Intensity Prostate Cancer	126,067	188,038	2.848	2.758	2.587	2.556	-0.059	-0.118	-0.001	-2.1%
Lung Cancer	141,418	149,836	7.622	7.146	7.500	6.852	0.172	-0.034	0.378	2.3%
Lymphoma	88,368	87,612	5.622	5.368	5.565	5.233	0.078	-0.072	0.229	1.4%
Colorectal/Small Intestine Cancer	79,221	83,213	8.568	7.839	7.844	7.298	-0.183	-0.537	0.172	-2.1%
Multiple Myeloma	90,502	93,675	7.117	6.372	7.066	6.265	0.056	-0.173	0.285	0.8%
Non-Reconciliation Eligible Cancers	74,426	100,743	5.760	5.470	5.218	5.014	-0.087	-0.278	0.103	-1.5%
High-Intensity Prostate Cancer	59,776	70,382	6.076	5.348	5.663	4.964	-0.029	-0.171	0.112	-0.5%
Chronic Leukemia	51,944	53,685	4.075	3.793	4.016	3.630	0.103	-0.010	0.217	2.5%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.

Source: Medicare claims 2014–2021.

Notes: OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. pp = percentage points. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit. Intensity (Number of Visits or Stays) measures are conditional on observing any use of measure and less than the 99.9 percentile.

Exhibit SB-17: Number of Radiation Therapy Services Relative Increases driven by Low-Intensity Prostate Cancer and Non-Reconciliation Eligible Cancer

Subgroup	Number of Episodes		OCM		COMP		Impact Estimates Through PP9			
	OCM	COMP	Baseline Mean	Int. Mean	Baseline Mean	Int. Mean	DID	90% LCL	90% UCL	Percent Change
Cancer Type										
Low-Risk Breast Cancer	17,504	19,215	22.974	23.443	23.687	25.007	-0.851	-1.891	0.188	-3.7%
High-Risk Breast Cancer	28,698	29,737	23.829	24.297	25.009	25.224	0.253	-0.588	1.094	1.1%
Low-Intensity Prostate Cancer	18,043	28,559	53.128	53.346	58.494	56.119	2.593	0.586	4.599	4.9%
Lung Cancer	40,372	43,905	35.693	34.587	36.361	35.578	-0.323	-1.409	0.763	-0.9%
Lymphoma	5,929	6,437	23.536	24.962	24.790	26.718	-0.502	-2.079	1.075	-2.1%
Colorectal/Small Intestine Cancer	10,473	11,158	32.427	34.219	32.967	34.290	0.470	-1.035	1.974	1.4%
Multiple Myeloma	4,791	4,919	14.456	15.207	15.952	15.735	0.967	-0.296	2.230	6.7%
Non-Reconciliation Eligible Cancers	8,780	12,835	23.807	23.333	25.974	23.238	2.263	0.640	3.887	9.5%
High-Intensity Prostate Cancer	7,178	8,196	18.543	20.633	18.640	20.657	0.073	-1.407	1.554	0.4%
Chronic Leukemia	687	626	26.943	27.430	28.136	29.984	-1.362	-6.973	4.250	-5.1%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.

Source: Medicare claims 2014–2021.

Notes: OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period. Pp = percentage points. PP: Performance period. DID: Difference-in-differences. LCL: Lower confidence limit. UCL: Upper confidence limit. Intensity (Number of Visits or Stays) measures are conditional on observing any use of measure and less than the 99.9 percentile.

Exhibit SC-1: Use of Imatinib versus Nilotinib/Dasatinib/Bosutinib was Less in OCM versus Comparison Episodes in PP1–3 and Did Not Differ in PP4–6 and PP7–9

Measure	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7-9	90% CI
Use of imatinib vs. nilotinib/dasatinib/ bosutinib	-2.5%	-5.0%, -0.1%	-2.8%	-5.1%, -0.4%	-2.7%	-5.6%, 0.2%	-1.8%	-5.0%, 1.4%
Use of imatinib vs. nilotinib/dasatanib/ bosutinib among beneficiaries with no prior TKI use	-2.5%	-6.3%, 1.2%	-3.7%	-8.1%, 0.7%	-2.3%	-7.1%, 2.4%	-1.4%	-6.2%, 3.4%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval.

Exhibit SC-2 shows generally similar trends in use of imatinib versus nilotinib/dasatinib/bosutinib in the baseline period.

Exhibit SC-2: Use of First-Generation versus Second-Generation TKIs by Quarter, Unadjusted
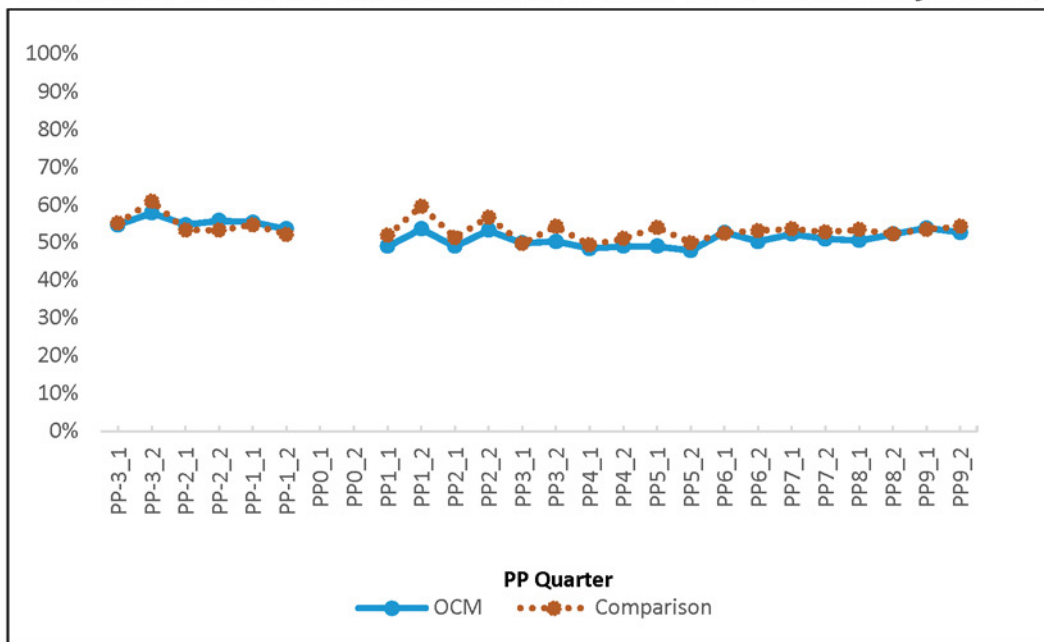
Source: Medicare claims 2014–2021.
Notes: Pre-trend estimate 0.5% per quarter in OCM relative to comparison episodes (95% CI: -0.3%, 1.3%), P=0.22. TKI: tyrosine kinase inhibitor.

Exhibit SC-3: Uptake of Osimertinib among Episodes Treated with Osimertinib or Erlotinib by Quarter, Unadjusted
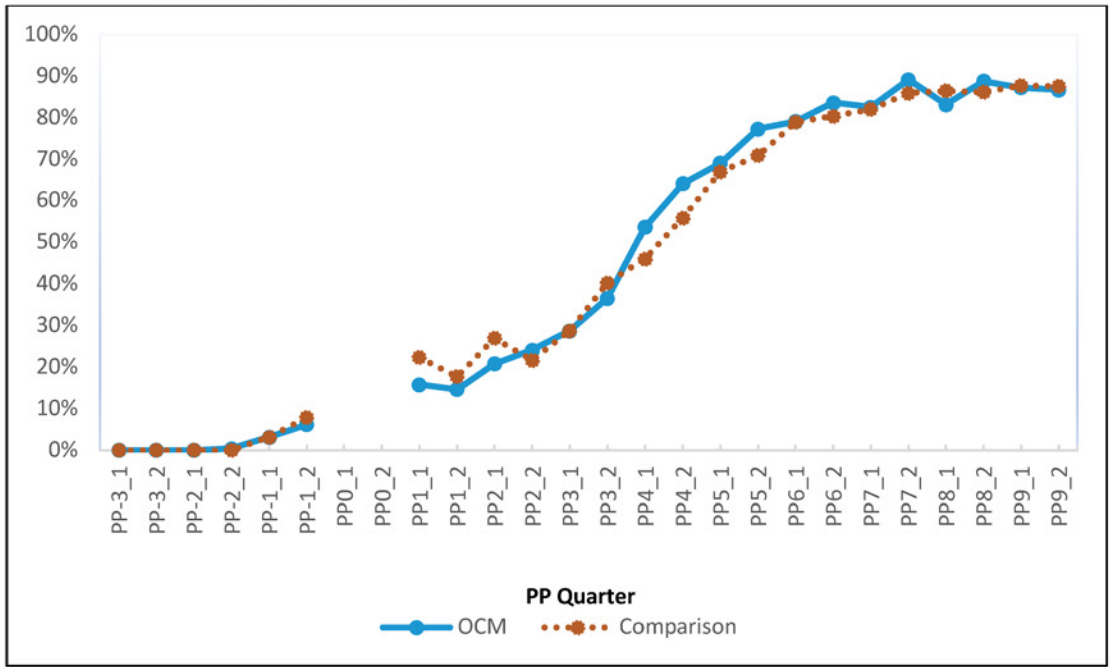
Source: Medicare claims 2014–2021.

Exhibit SC-4: OCM Led to a Relative Increase in Use of Immunotherapy for Lung Cancer, and This Was Similar in PP1–3, PP4–6, and PP7–9

Use of Immunotherapy	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
Lung cancer	4.3%	1.9%, 6.6%	2.8%	0.7%, 4.9%	3.0%	0.8%, 5.2%	4.7%	2.2%, 7.1%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval.

Exhibit SC-5: Use of Immunotherapy for Lung Cancer by Quarter, Unadjusted
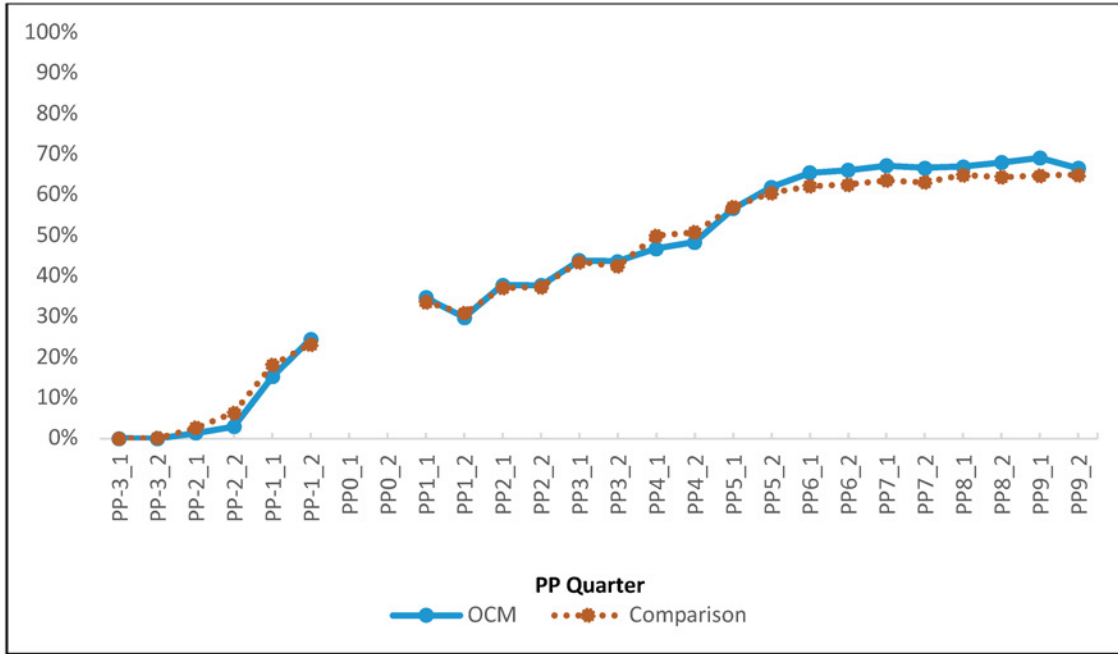
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.1% (95% CI: -0.4%, 0.3%), P=0.665. Immunotherapy approvals for lung cancer indications occurred during the period for episodes starting in PP-2_1, PP-1_2, PP1_2, PP2_2, PP4_1, PP5_1, and PP5_2.

Exhibit SC-6: Use of Originator Rituximab, Subcutaneous Rituximab, and Biosimilar Rituximab for OCM versus Comparison Episodes by Quarter, Unadjusted
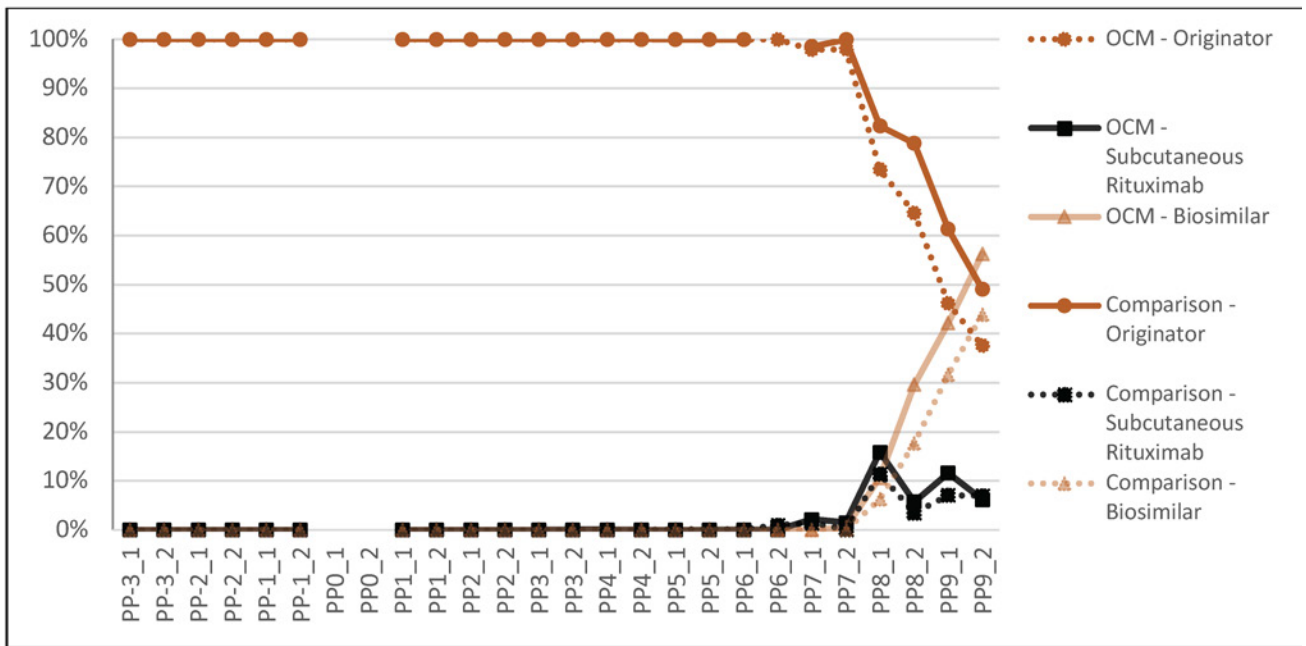
Source: Medicare claims 2014–2021.

Exhibit SC-7: Use of Biosimilar Rituximab for OCM versus Comparison Episodes by Quarter, Unadjusted
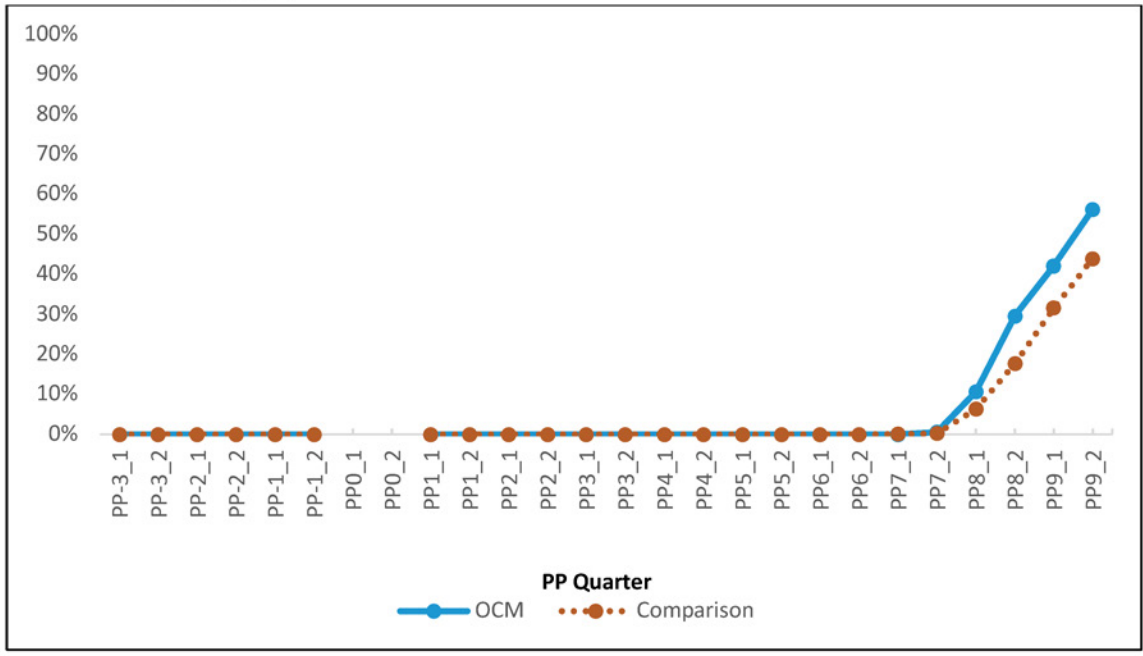
Source: Medicare claims 2014–2021.

Exhibit SC-8: Use of Bevacizumab Biosimilar by Quarter, Unadjusted
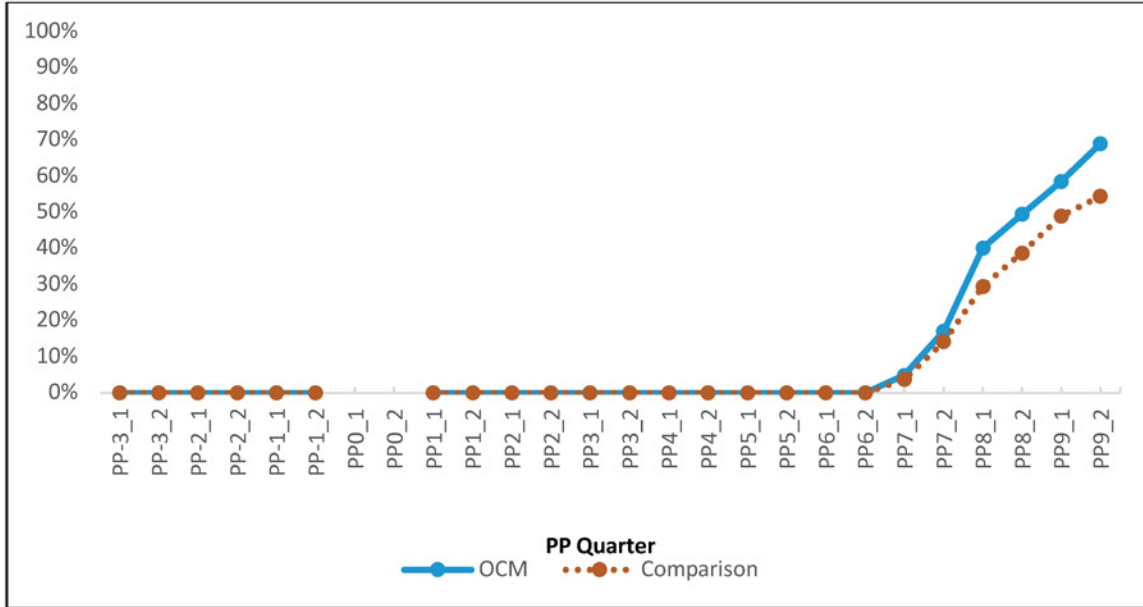
Source: Medicare claims 2014–2021.

Exhibit SC-9: Use of Generic Imatinib by Quarter, Unadjusted
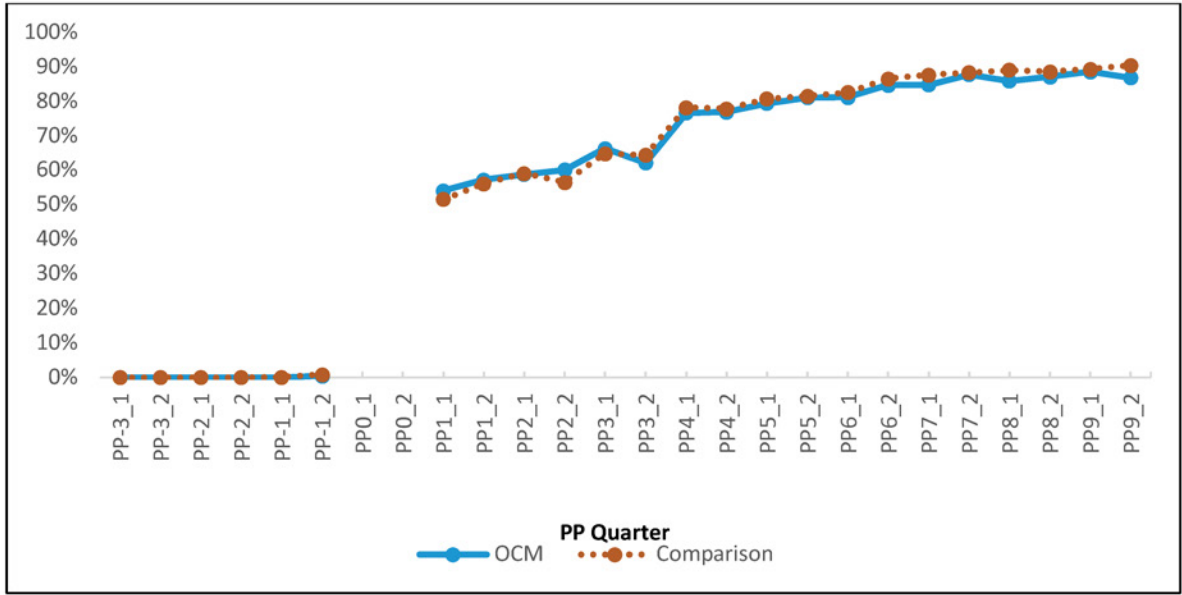
Source: Medicare claims 2014–2021.

Exhibit SC-10: Uptake of Generic Abiraterone by Quarter, Unadjusted
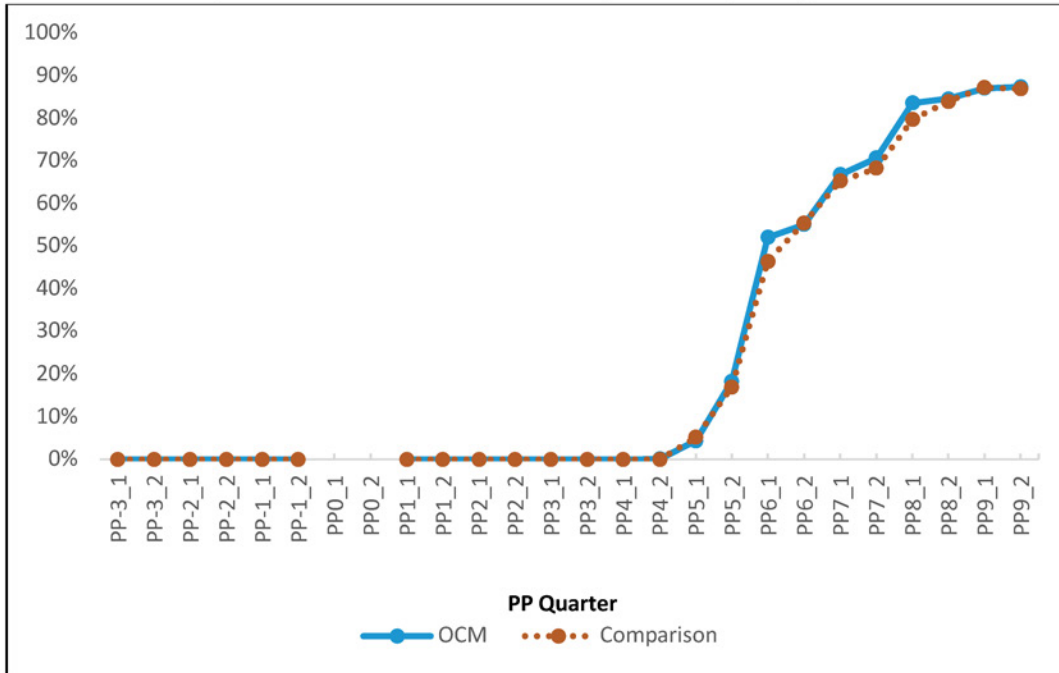
Source: Medicare claims 2014–2021.

Exhibit SC-11: Use of Generic Erlotinib by Quarter, Unadjusted
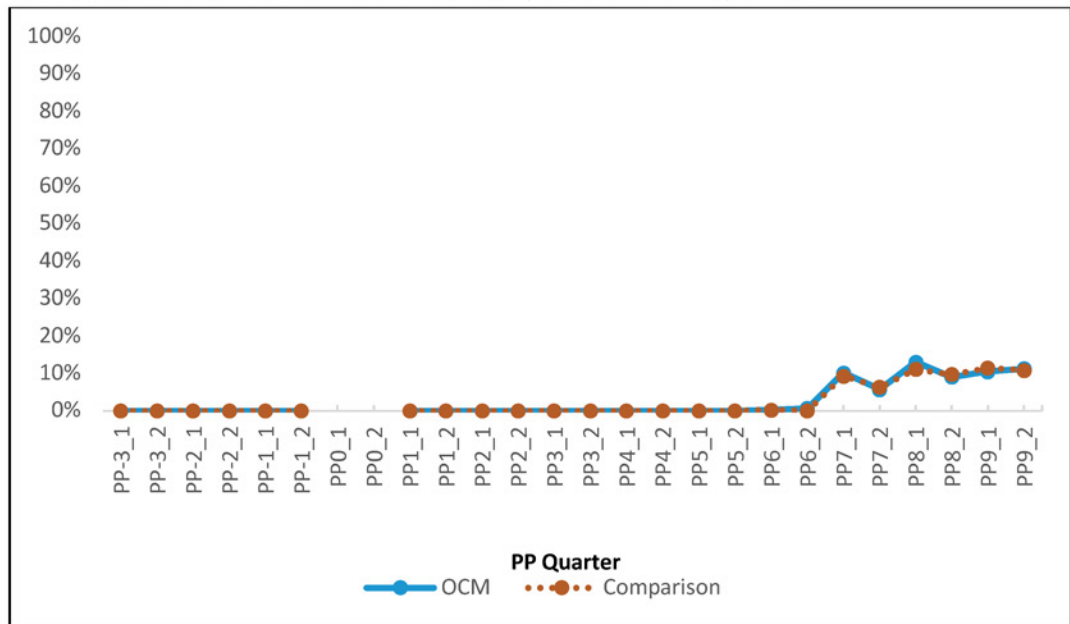
Source: Medicare claims 2014–2021.

Exhibit SC-12: No Impact of OCM on Palliative Radiation for Bone Metastasis in PP 1–3; PP 4–6; PP7–9

Palliative Radiation for Bone Metastasis	DID Impact PP 1–9	90% CI	DID Impact PP1-3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
10 or fewer radiation fractions – all episodes	-0.7%	-2.1%, 0.6%	-0.8%	-2.5%, 1.0%	-0.8%	-2.5%, 1.0%	-0.2%	-2.1%, 1.6%
Practices with a radiation oncologist	0.1%	-1.7%, 1.9%	-0.2%	-2.7%, 2.2%	-0.3%	-2.5%, 2.0%	2.6%	0.1%, 5.1%
Practices without a radiation oncologist	-1.8%	-3.9%, 0.2%	-1.1%	-3.7%, 1.5%	-1.2%	-4.0%, 1.7%	-4.0%	-6.7%, -1.3%
Single radiation fraction – all episodes	0.7%	-1.1%, 2.5%	1.1%	-0.8%, 3.0%	-0.6%	-2.6%, 1.3%	2.5%	-0.5%, 5.4%
Practices with a radiation oncologist	1.2%	-1.1%, 3.6%	2.0%	-0.4%, 4.4%	-1.1%	-3.7%, 1.6%	4.3%	0.3%, 8.2%
Practices without a radiation oncologist	-1.4%	-4.0%, 1.3%	-1.0%	-4.3%, 2.3%	-1.8%	-4.6%, 1.0%	-1.6%	-5.5%, 2.4%

Shading indicates statistically significant estimates at $p \le 0.01$, $p \le 0.05$, and $p \le 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval.

Exhibit SC-13: Percentage Receiving 10 or Fewer Radiation Fractions for Treatment of Bone Metastasis by Quarter, Unadjusted
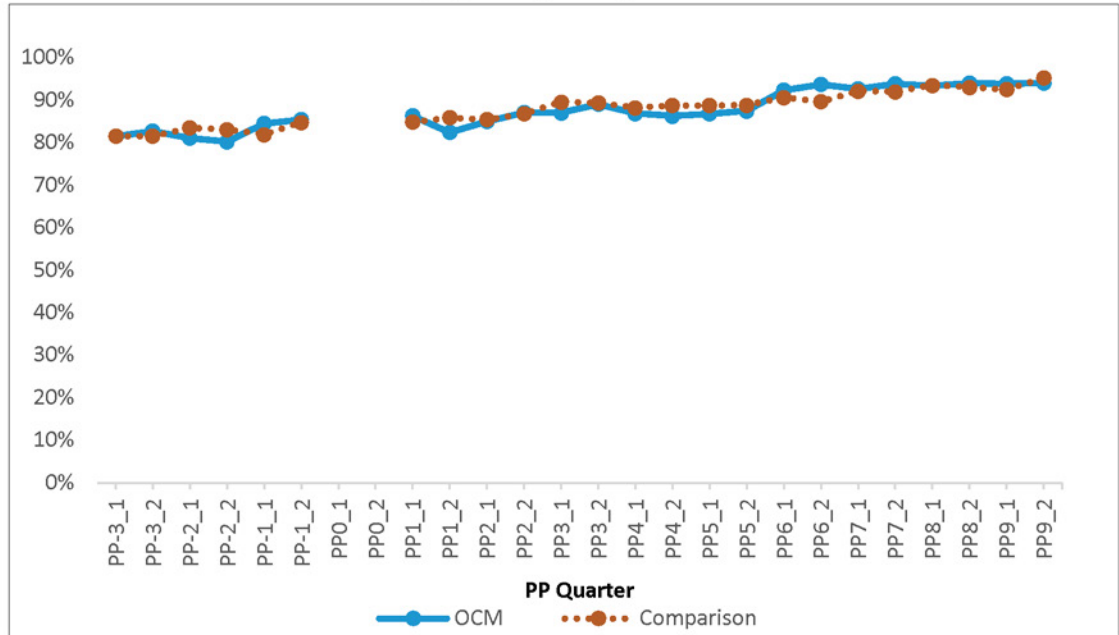
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.2% per quarter (95% CI: -1.0%, 1.4%), P=0.778.
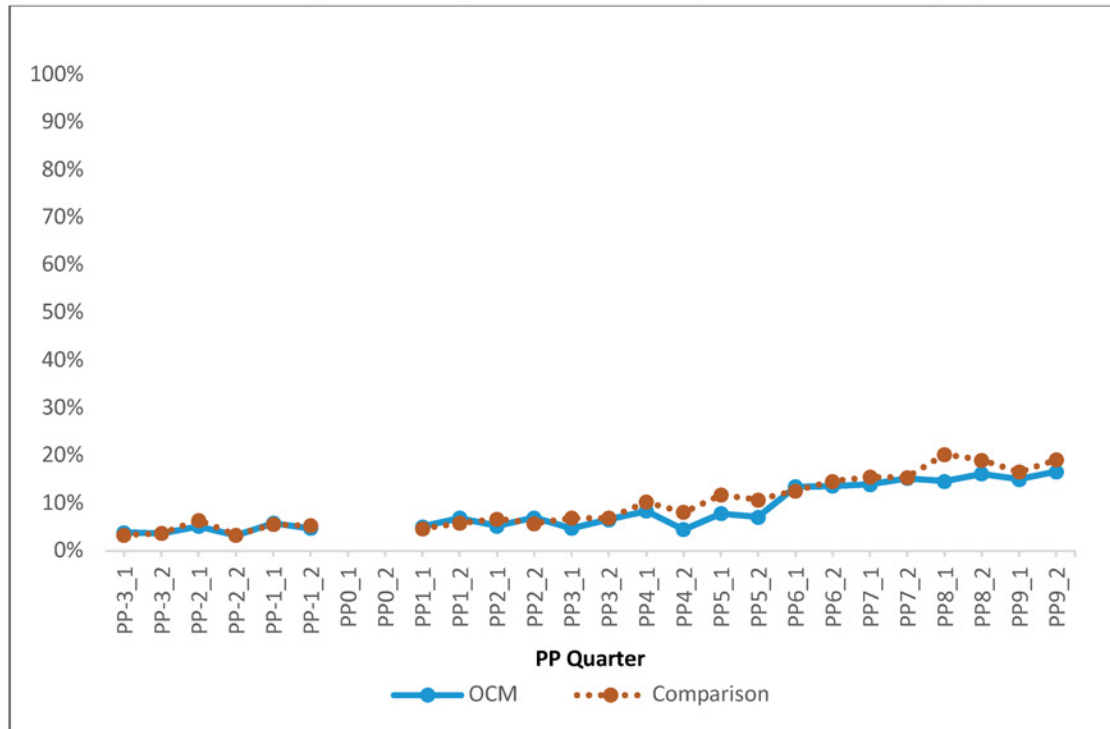
Exhibit SC-14: Percentage Receiving Single Radiation Fraction for Treatment of Bone Metastasis by Quarter, Unadjusted
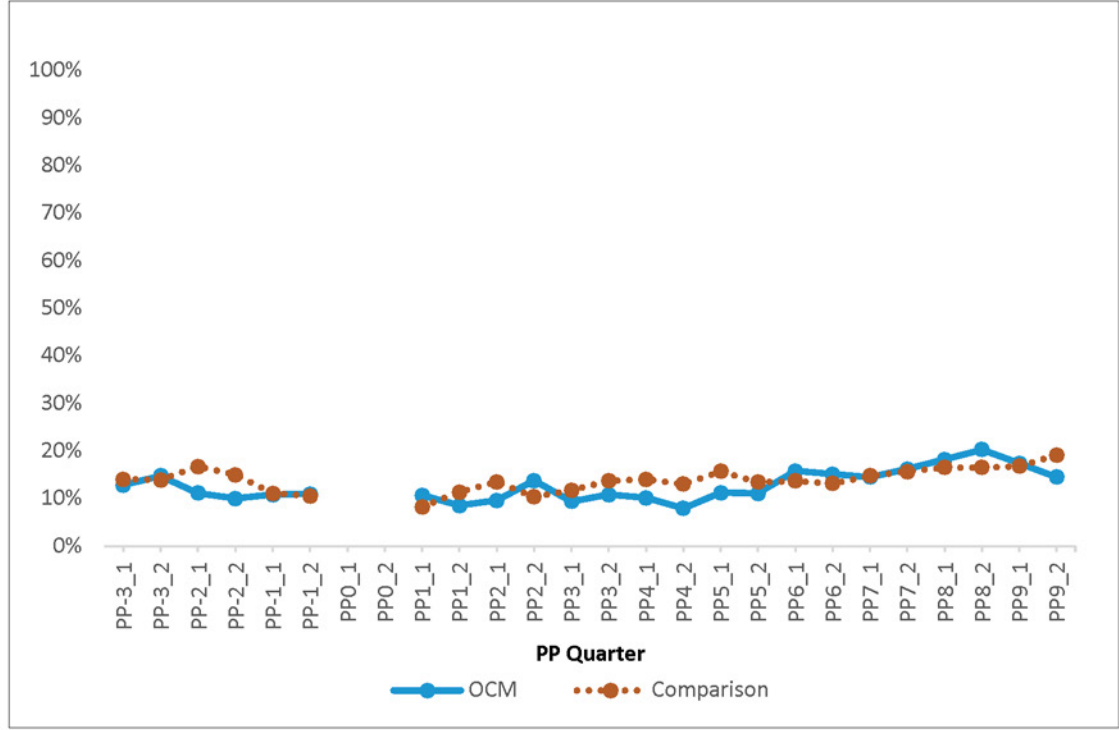
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.3% per quarter (95% CI: -0.7%, 1.2%), P=0.583.

Exhibit SC-15: Percentage Receiving Stereotactic Body Radiation Therapy by Quarter, Unadjusted

Source: Medicare claims 2014–2021.

Exhibit SC-16: No Consistent Effect of OCM on Timeliness of Chemotherapy for Colorectal or Breast Cancer Over Time (PP1–3, PP4–6, PP7–9)

Proportion of Beneficiaries Receiving Chemotherapy within 60 Days of Surgery for...	DID Impact PP 1-9	90% CI	DID Impact PP1-3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
Colorectal cancer	-0.4%	-2.4%, 1.5%	-0.3%	-2.6%, 2.0%	-1.1%	-3.5%, 1.2%	0.3%	-2.4%, 3.0%
Breast cancer (high risk)	1.2%	-0.7%, 3.1%	0.3%	-2.0%, 2.6%	2.6%	0.3%, 4.9%	0.5%	-1.7%, 2.8%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval
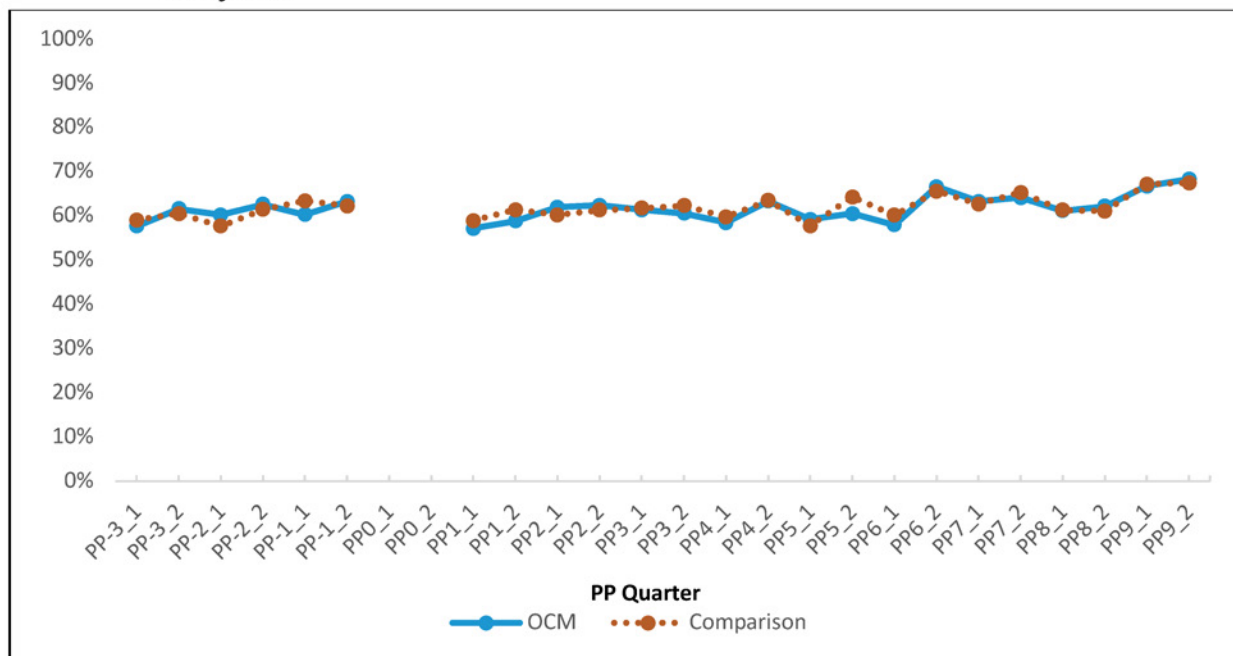
Exhibit SC-17: Breast Cancer – Adjuvant Chemotherapy within 60 Days of Surgery, by Quarter, Unadjusted
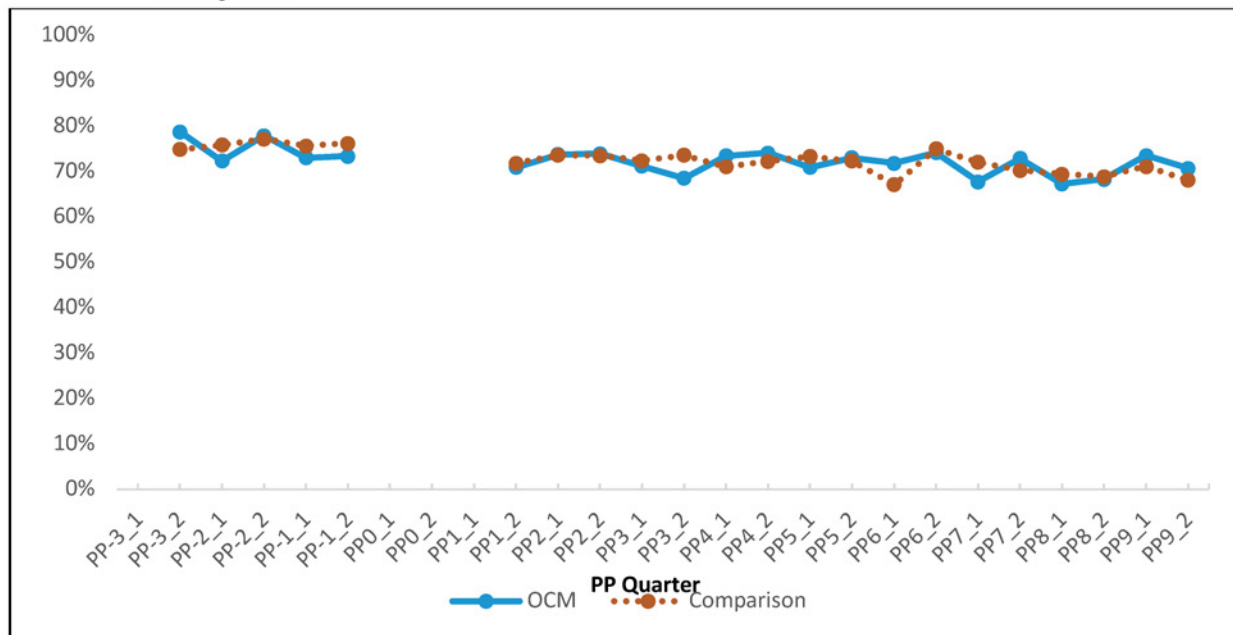
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.8% per quarter (95% CI: -2.0%, 0.5%), P=0.219.

Exhibit SC-18: Colorectal Cancer – Adjuvant Chemotherapy within 60 Days of Surgery, by Quarter, Unadjusted

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.2% per quarter (95% CI: -1.3%, 1.0%), P=0.799.

Exhibit SC-19: Small Impact of OCM on Adherence to TKIs for CML in PP7–9

Measure	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
Abiraterone/enzalutamide for prostate cancer	0.4%	-0.3%, 1.1%	0.3%	-0.5%, 1.1%	0.4%	-0.4%, 1.2%	0.4%	-0.5%, 1.3%
TKIs for CML	-0.7%	-1.6%, 0.3%	0.0%	-0.8%, 0.9%	-0.7%	-1.9%, 0.6%	-1.5%	-2.7%, -0.4%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval. TKI: tyrosine kinase inhibitor. CML: chronic myeloid leukemia.

Exhibit SC-20: Adherence to TKIs for CML in OCM and Comparison Episodes by Quarter, Unadjusted
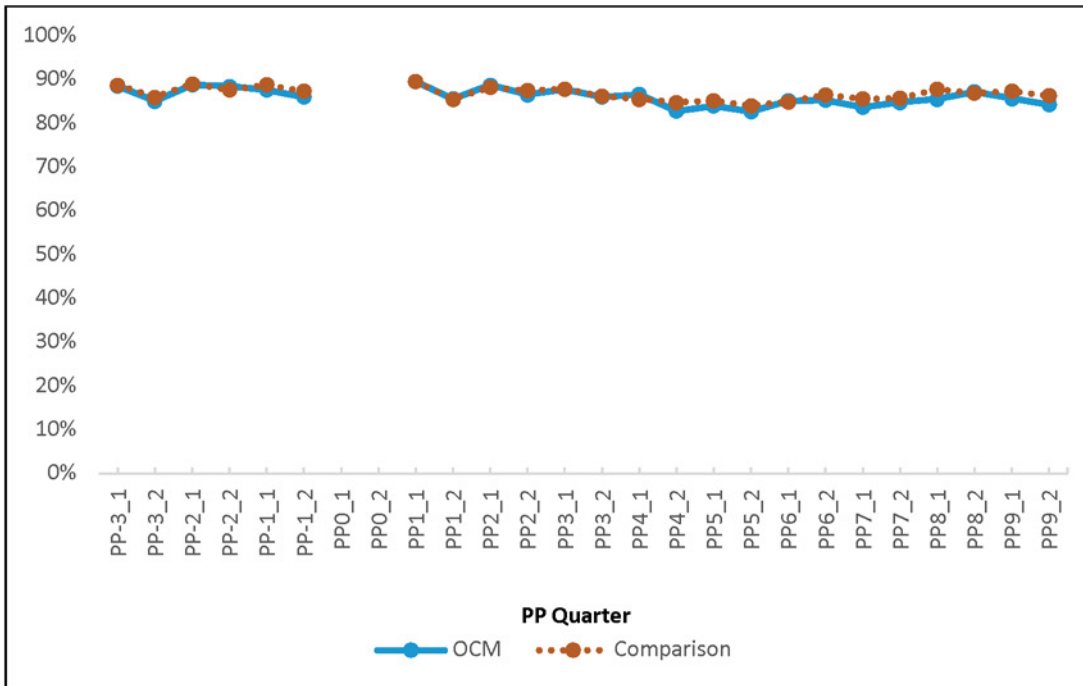
Source: Medicare claims 2014–2021.
Notes: Pre-trend estimate -0.2% per quarter in OCM relative to comparison episodes (95% CI: -0.6%, 0.2%), P=0.236. TKI: tyrosine kinase inhibitor. CML: chronic myeloid leukemia.

Exhibit SC-21: Adherence to Abiraterone or Enzalutamide in OCM and Comparison Episodes by Quarter, Unadjusted
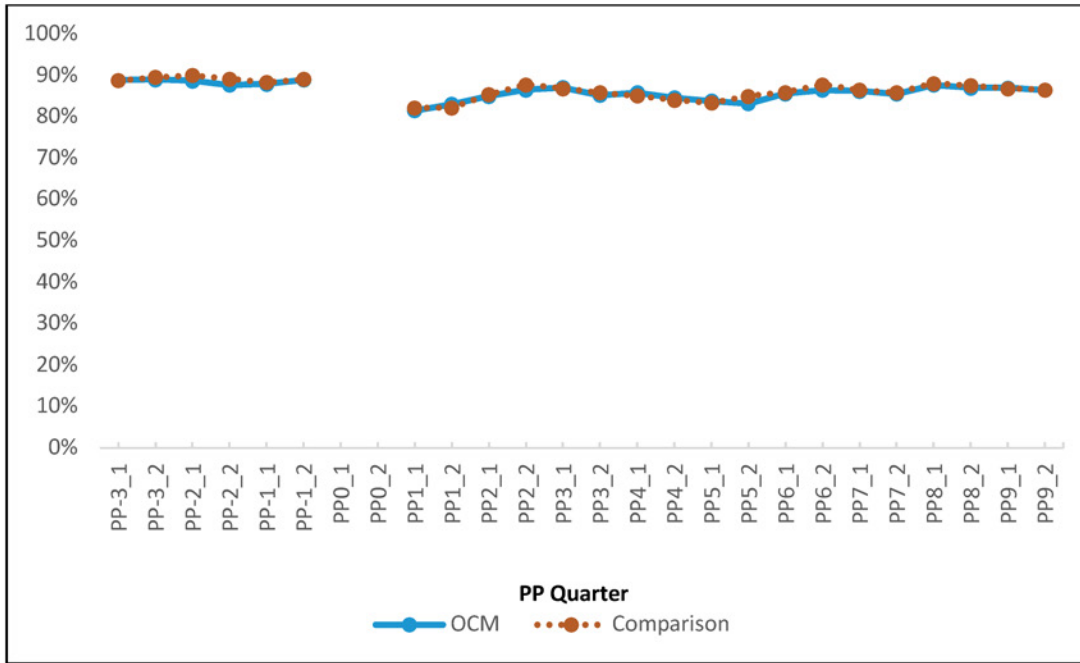
Source: Medicare claims 2014–2019.
Notes: Pre-trend estimate 0.0% per quarter in OCM relative to comparison episodes (95% CI: -0.3%, 0.3%), P=0.959.

Exhibit SC-22: Estimated OCM Impacts on Low-Value Use of Bone-Modifying Agents Increased from PP1–3 to PP7–9

Measure	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
Receiving any bone-modifying agent								
Breast cancer and bone metastases	-0.3%	-1.7%, 1.0%	0.7%	-0.7%, 2.0%	0.1%	-1.4%, 1.6%	-1.8%	-3.6%, -0.1%
Prostate cancer and bone metastases	-0.2%	-2.2%, 1.8%	-0.3%	-2.1%, 1.5%	0.5%	-1.7%, 2.7%	-0.6%	-3.1%, 2.0%
Lung cancer and bone metastases	-0.8%	-3.0%, 1.4%	-0.6%	-2.7%, 1.5%	-0.7%	-3.2%, 1.9%	-0.8%	-3.8%, 2.1%
Receiving any denosumab								
Breast cancer and bone metastases	-7.2%	-9.4%, -5.0%	-3.8%	-5.8%, -1.8%	-7.0%	-9.6%, -4.5%	-11.9%	-15.1%, -8.7%
Prostate cancer and bone metastases	-6.6%	-8.5%, -4.6%	-2.6%	-4.4%, -0.9%	-6.4%	-8.7%, -4.0%	-11.4%	-14.1%, -8.7%
Lung cancer and bone metastases	-7.0%	-10.1%, -3.8%	-3.5%	-6.8%, -0.2%	-5.8%	-9.7%, -1.9%	-12.4%	-16.8%, -8.1%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: OCM: OCM intervention group. COMP: Comparison group. Int.: Intervention period.. LCL: Lower confidence limit. UCL: Upper confidence limit.
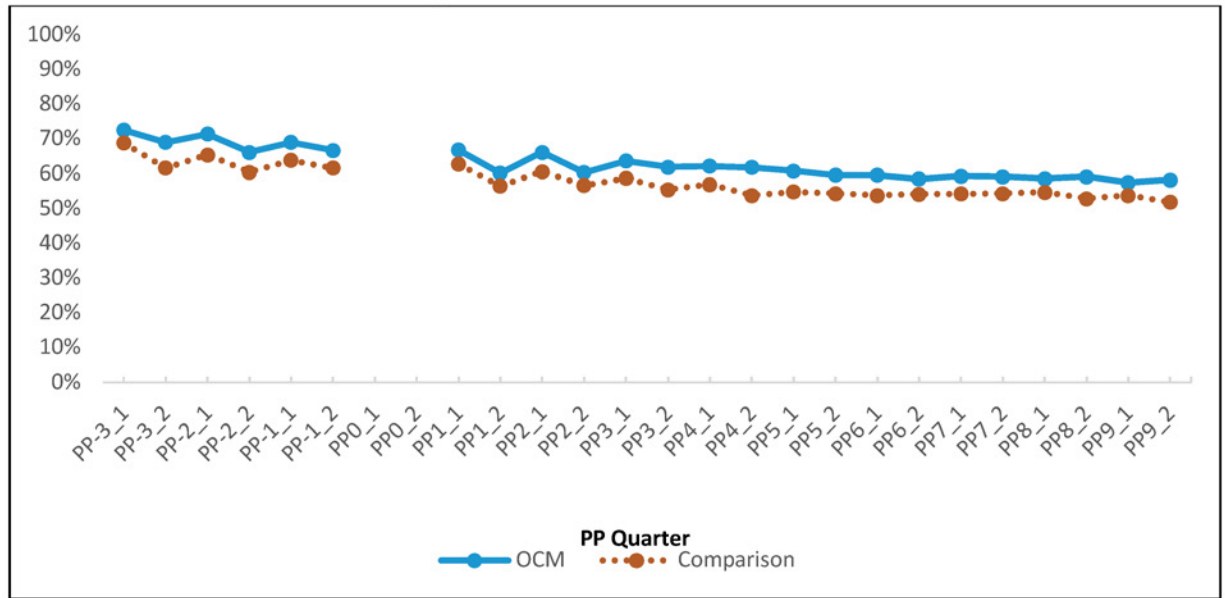
Exhibit SC-23: Quarterly Trends in Use of Any Bone-Modifying Agents among Patients with Breast Cancer, Unadjusted
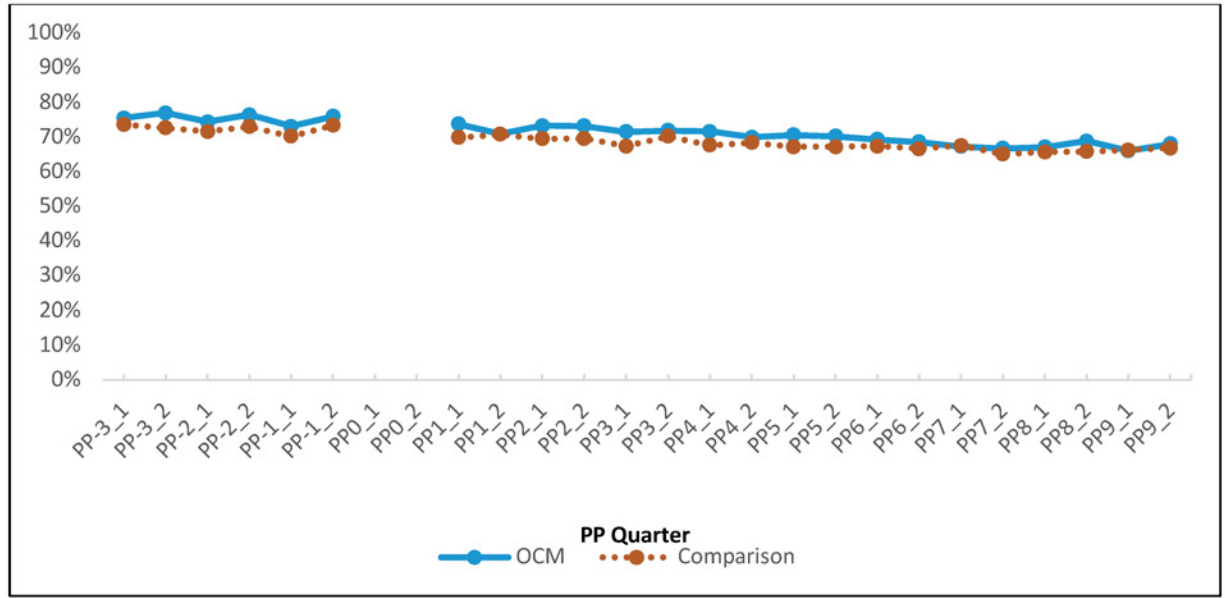
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.0% per quarter (95% CI: -0.4%, 0.5%), P= 0.861.
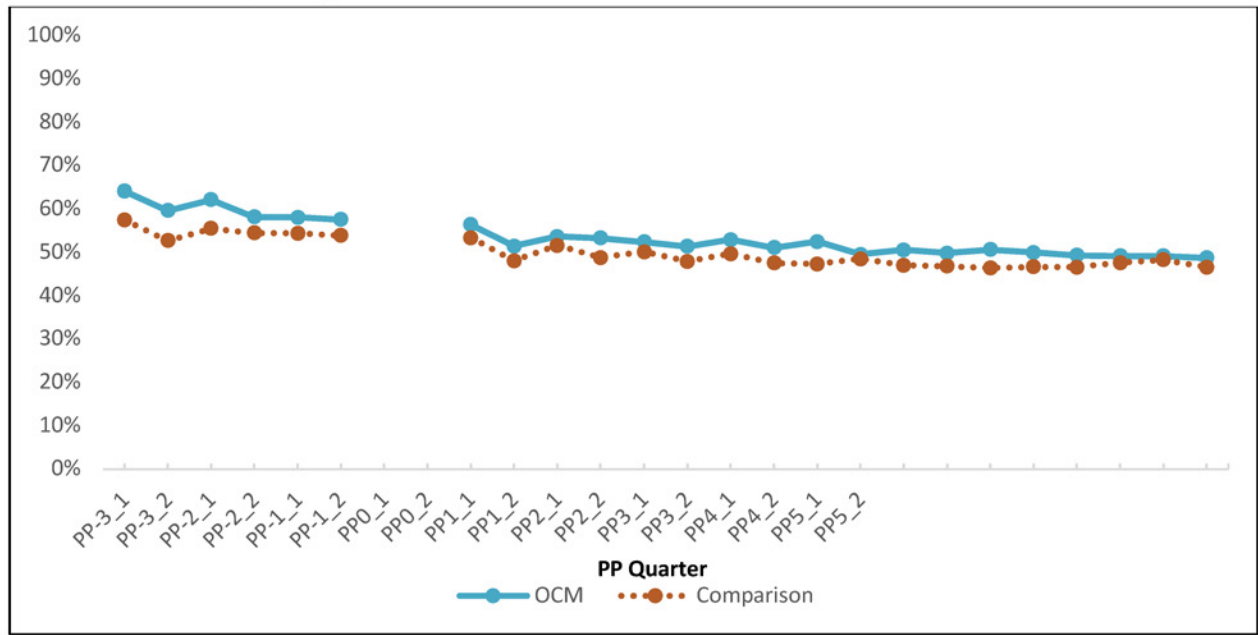
Exhibit SC-24: Quarterly Trends in Use of Any Bone-Modifying Agents among Patients with Prostate Cancer, Unadjusted
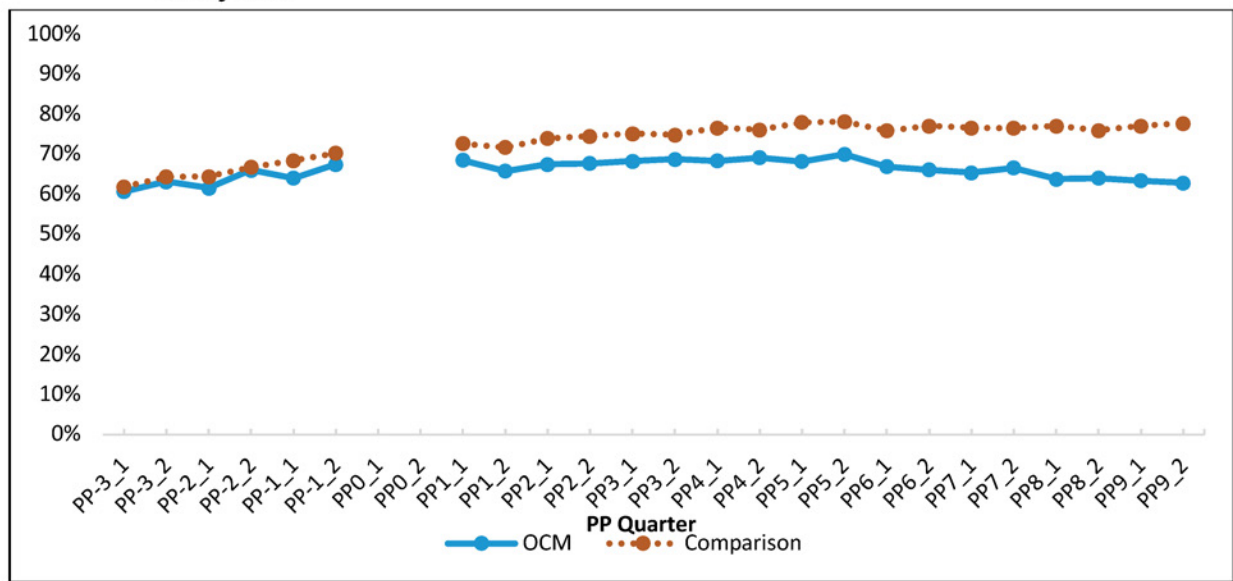

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.1% per quarter (95% CI: -0.5%, 0.7%), P= 0.770.

Exhibit SC-25: Quarterly Trends in Use of Any Bone-Modifying Agents among Patients with Lung Cancer, Unadjusted
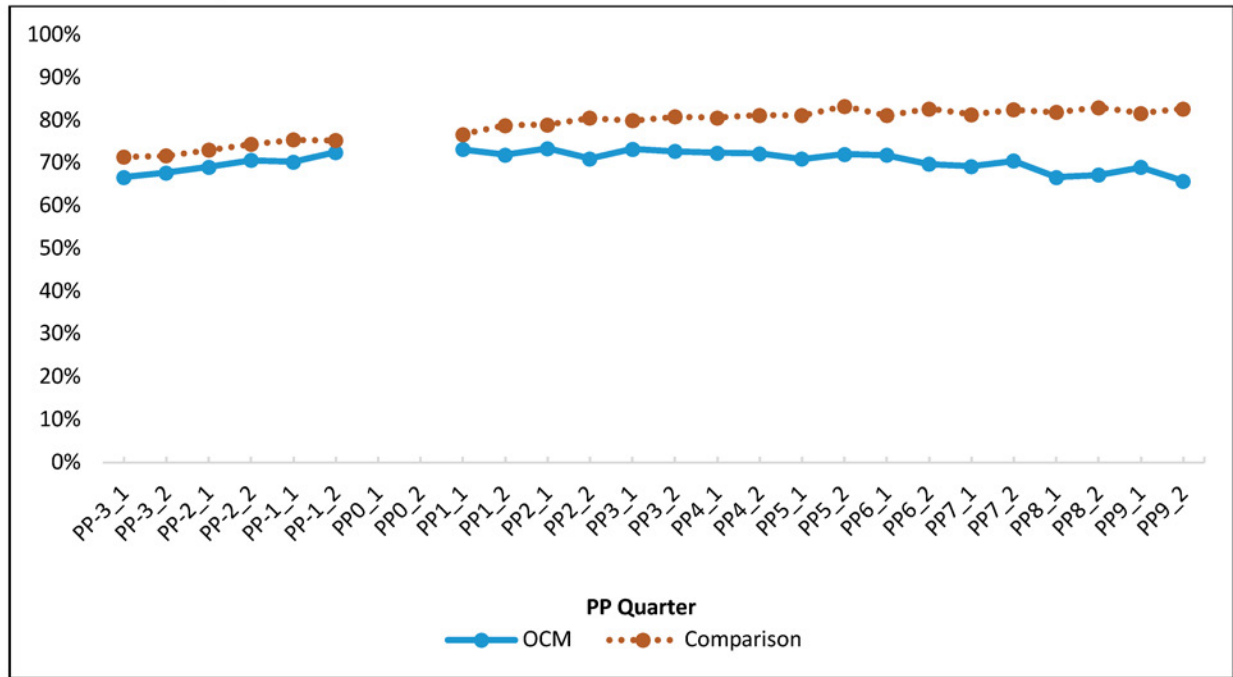

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.7% per quarter (95% CI: -1.6%, 0.3%), P= 0.176.

**Exhibit SC-26: Quarterly Trends in Use of Any Denosumab among Patients with Breast Cancer, Unadjusted**

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.5% per quarter (95% CI: -1.2%, 0.2%), P=0.183.

Exhibit SC-27: Quarterly Trends in Use of Any Denosumab among Patients with Prostate Cancer, Unadjusted

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.1% per quarter (95% CI: -0.6%, 0.8%), P=0.820.

Exhibit SC-28: Quarterly Trends in Use of Any Denosumab among Patients with Lung Cancer by Quarter, Unadjusted
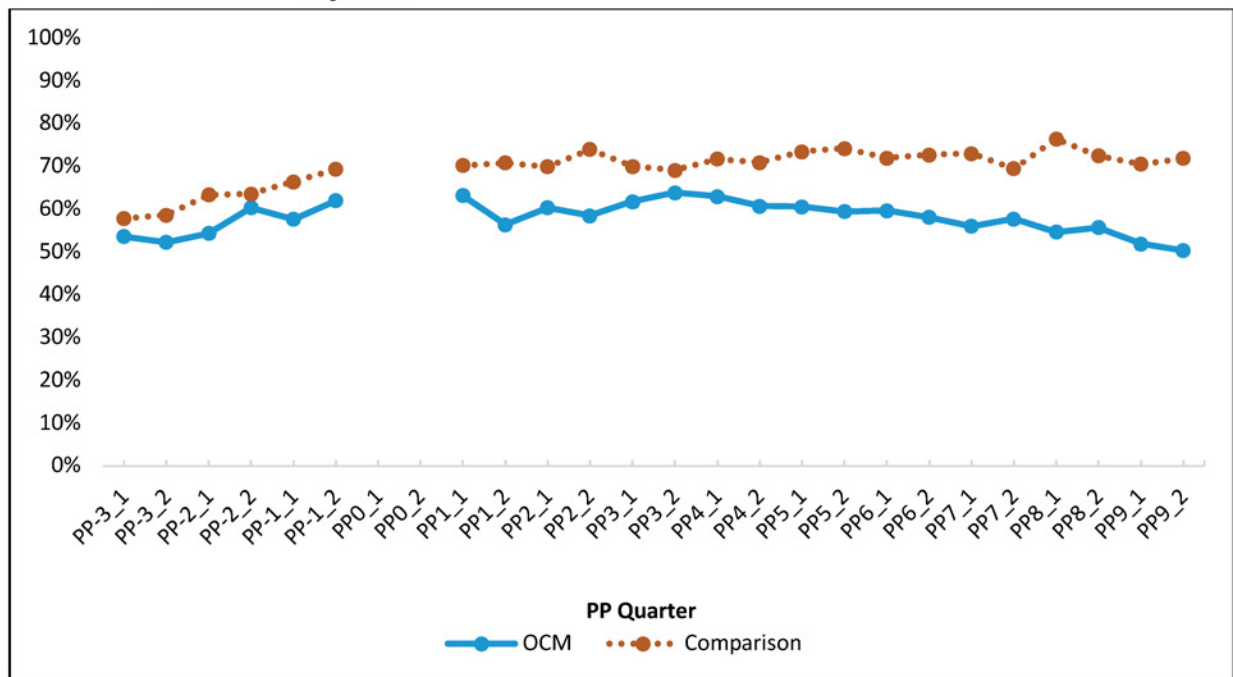
Source: Medicare claims 2014–2019.
Notes: OCM quarterly trend versus comparison group trend: -0.5% per quarter (95% CI: -1.8%, 0.8%), P=0.491.

**Exhibit SC-29: OCM Led to Decreased Use of Palonosetron in OCM Episodes in PP1–3 and PP4–5, but not in PP7–9**

Measure	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
Receipt of palonosetron	-7.2%	-13.6%, -0.8%	-7.0%	-11.6%, -2.4%	-9.6%	-18.7%, -0.5%	-4.3%	-10.7%, 2.2%
Receipt of NK1 antagonist	-1.0%	-3.3%, 1.2%	-1.6%	-5.2%, 2.0%	-7.5%	-12.5%, -2.5%	6.0%	3.1%, 9.0%
Receipt of guideline-recommended therapy	0.2%	-2.2%, 2.7%	-2.0%	-6.1%, 2.0%	-4.7%	-9.3%, -0.2%	7.3%	4.0%, 10.6%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval Baseline trends were not parallel for OCM and comparison episodes in receipt of NK1 antagonists or receipt of guideline-recommended therapy, precluding definitive interpretation of OCM impact. NK1: neurokinin-1.

Exhibit SC-30: Prophylactic Use of Palonosetron During High Emetic Risk Chemotherapy Declined Initially for OCM Episodes Before Increasing in Later Quarters, Unadjusted
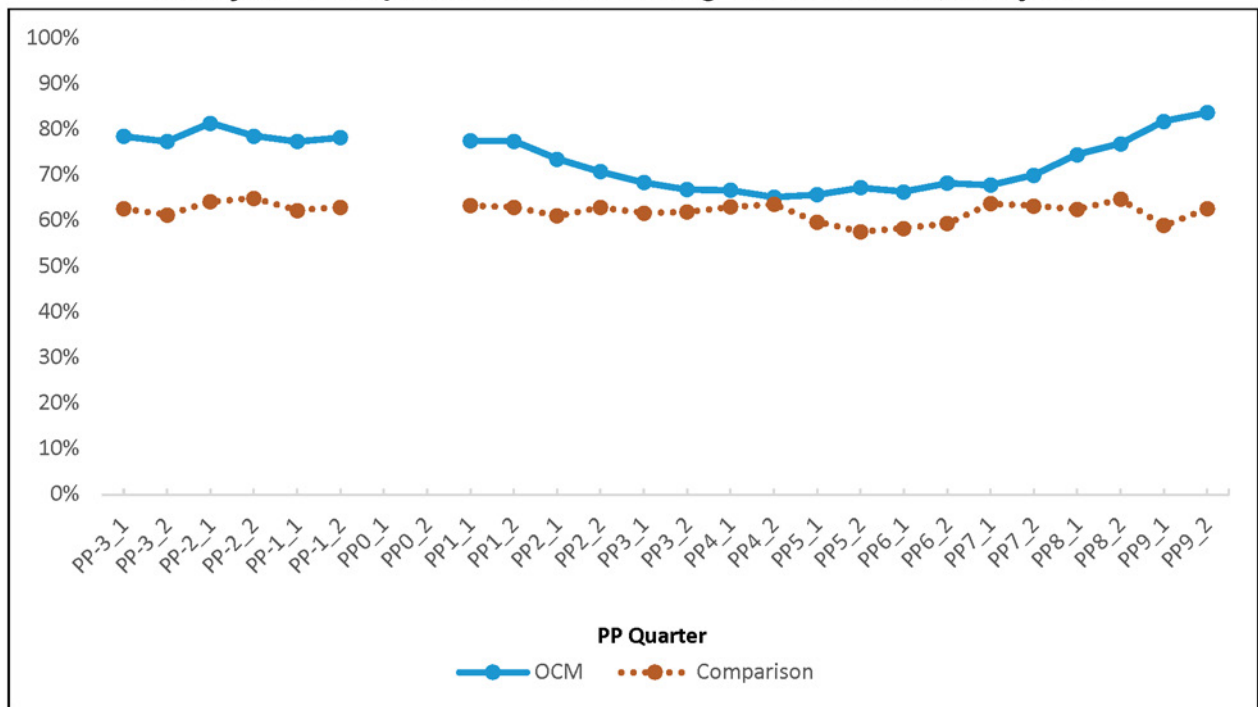
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.1% per quarter (95% CI: -1.2%, 1.0%), P= 0.817.

Exhibit SC-31: Prophylactic Use of NK1 Antagonists During High Emetic Risk Chemotherapy, Unadjusted
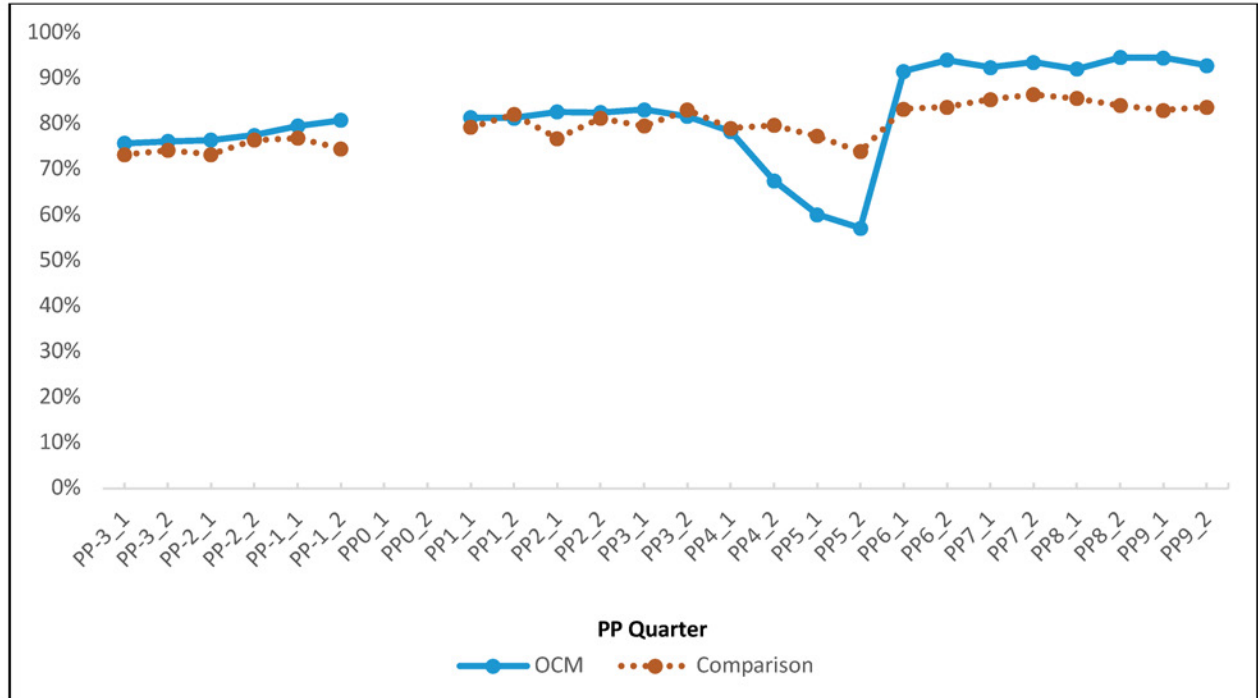
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.9% per quarter (95% CI: 0.02%, 1.9%), P= 0.045.

Exhibit SC-32: Prophylactic Use of Guideline Recommended Antiemetic Therapies, Unadjusted

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 1.3% per quarter (95% CI: 0.4%, 2.3%), P= 0.007.

Exhibit SC-33: OCM Impacts on Less Use of Lower-Value Prophylactic GCSF Became More Evident in PP4–6 and PP7–9

Measure	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7–9	90% CI
Use of Growth Factors – Breast Cancer								
High risk	1.4%	-1.1%, 3.9%	0.0%	-2.3%, 2.3%	2.1%	-0.9%, 5.2%	1.4%	-1.4%, 4.1%
Intermediate risk	-7.7%	-12.3%, -3.1%	-7.7%	-13.0%, -2.4%	-6.7%	-12.5%, -0.9%	-8.6%	-14.0%, -3.2%
Low risk	-0.3%	-0.7%, 0.2%	0.0%	-0.6%, 0.5%	-0.2%	-0.7%, 0.4%	-0.6%	-1.3%, 0.1%
Use of Growth Factors – Colorectal Cancer								
Intermediate risk	0.0%	-1.9%, 2.0%	1.5%	-0.7%, 3.8%	1.3%	-0.9%, 3.4%	-2.6%	-5.3%, 0.1%
Low risk	-1.2%	-2.3%, -0.2%	0.0%	-1.0%, 1.1%	-1.5%	-2.7%, -0.4%	-2.0%	-3.5%, -0.6%
Use of Growth Factors – Lung Cancer								
Intermediate risk	-2.0%	-4.2%, 0.1%	-0.9%	-3.2%, 1.3%	-2.1%	-4.4%, 0.3%	-2.9%	-5.7%, -0.1%
Low risk	-1.1%	-3.3%, 1.0%	-0.3%	-2.1%, 1.6%	-0.9%	-3.3%, 1.4%	-2.1%	-4.8%, 0.5%

Shading indicates statistically significant estimates at $p \le 0.01$, $p \le 0.05$, and $p \le 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: DID: Difference-in-differences. CI: Confidence interval. GCSF: white blood cell growth factor.

Exhibits SC-34 through **SC-40** show unadjusted quarterly rates of GCSF use by cancer type and category of chemotherapy neutropenia risk. Baseline trends in prophylactic GCSF use were similar for OCM and comparison episodes.

Exhibit SC-34: Use of Prophylactic GCSF for Breast Cancer – High-Risk Regimens by Quarter, Unadjusted
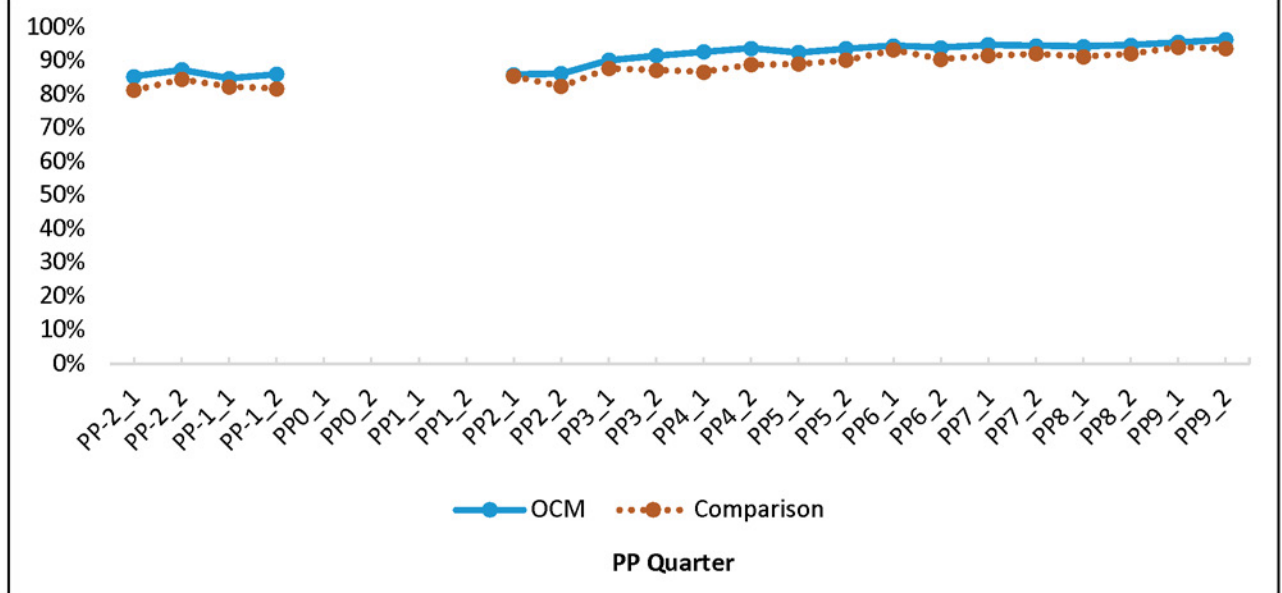
Source: Medicare claims 2014–2021.
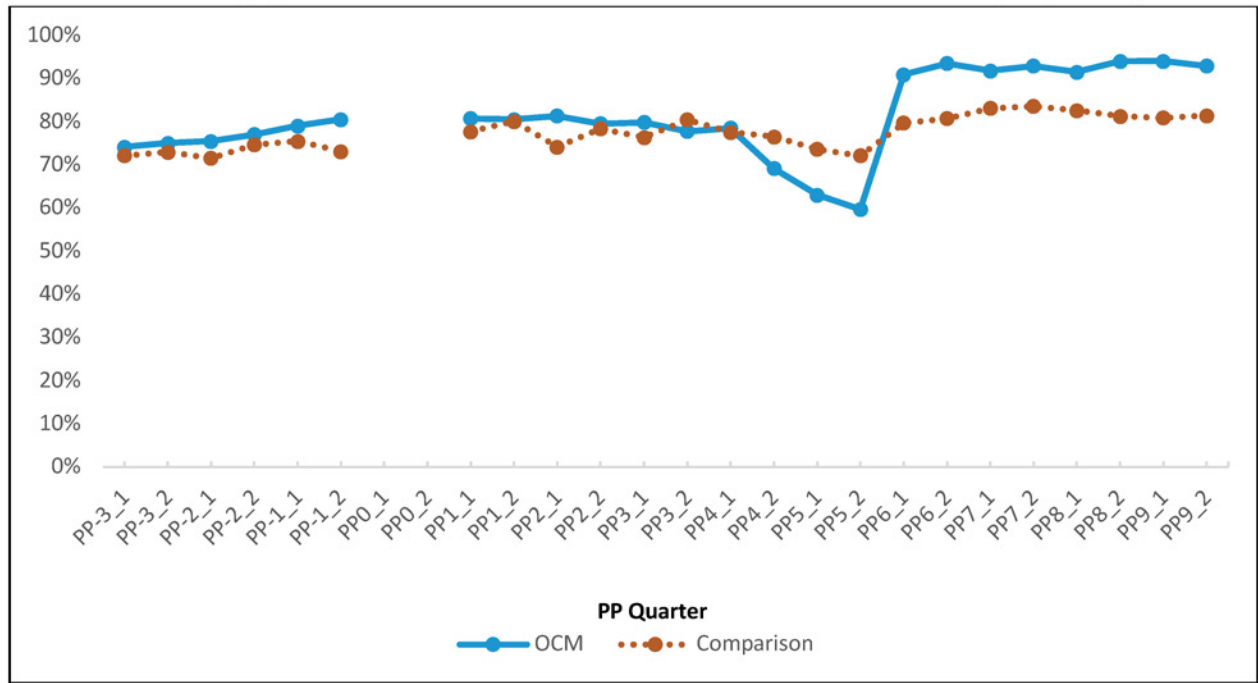**Notes:** OCM quarterly trend versus comparison group trend: 0.2% per quarter (95% CI: -1.5%, 1.8%), P=0.855. GCSF: white blood cell growth factor.

Exhibit SC-35: Use of Prophylactic GCSF for Breast Cancer – Intermediate-Risk Regimens by Quarter, Unadjusted

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.3% per quarter (95% CI: -3.1%, 3.7%), P=0.873. GCSF: white blood cell growth factor.

Exhibit SC-36: Use of Prophylactic GCSF for Breast Cancer – Low-Risk Regimens by Quarter, Unadjusted
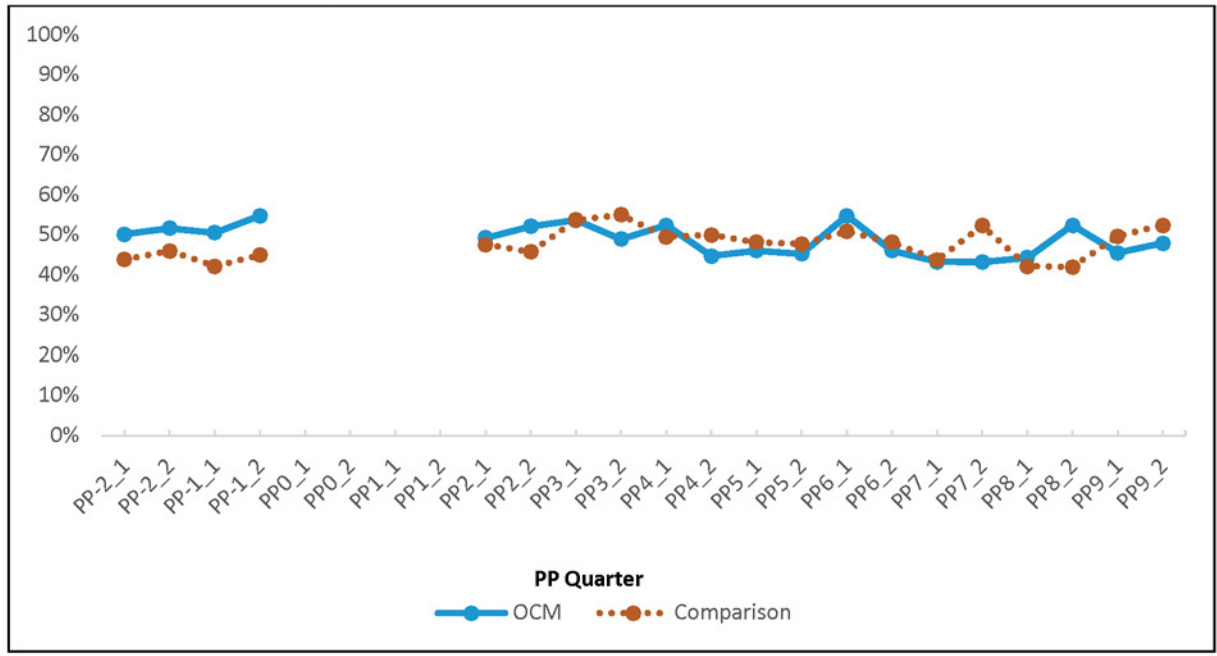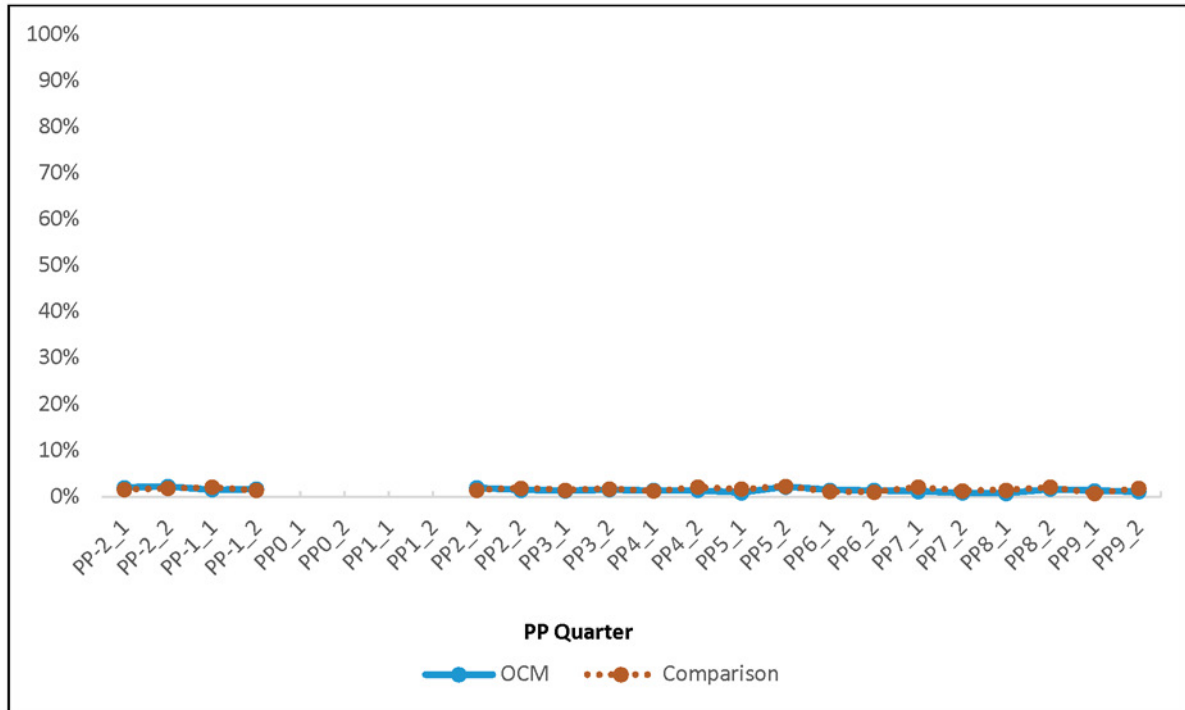

Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.1% per quarter (95% CI: -0.5%, 0.4%), P=0.814. GCSF: white blood cell growth factor.

Exhibit SC-37: Use of Prophylactic GCSF for Lung Cancer – Intermediate-Risk Regimens by Quarter, Unadjusted
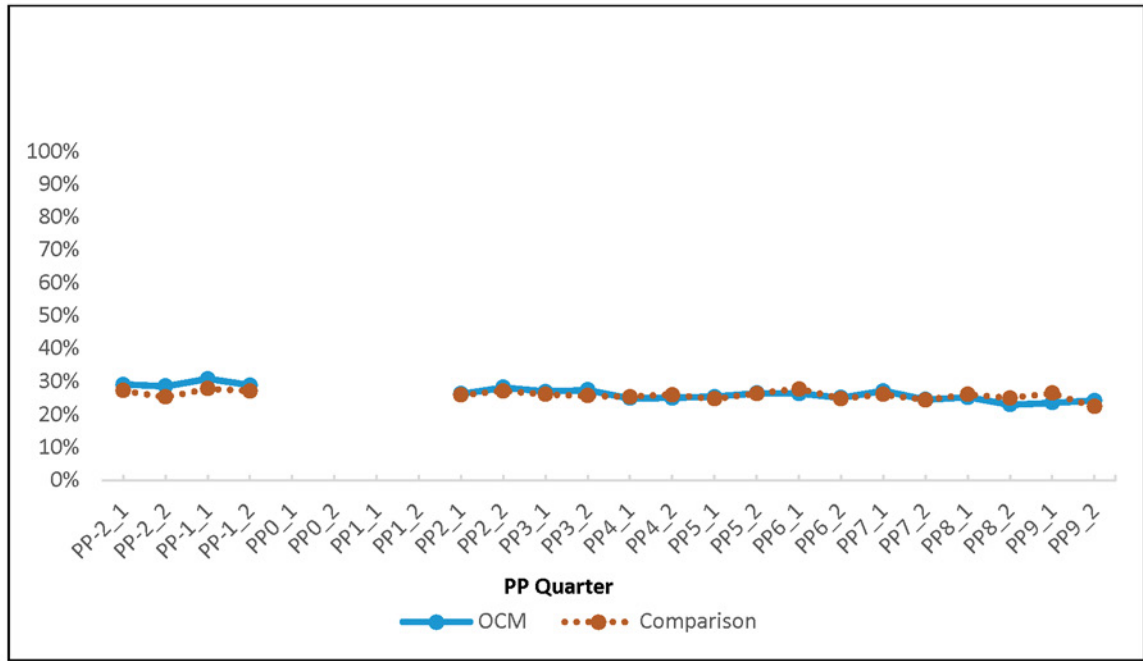
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.1% per quarter (95% CI: -1.3%, 1.6%), P=0.861. GCSF: white blood cell growth factor.

Exhibit SC-38: Use of Prophylactic GCSF Use for Lung Cancer – Low-Risk Regimens by Quarter, Unadjusted
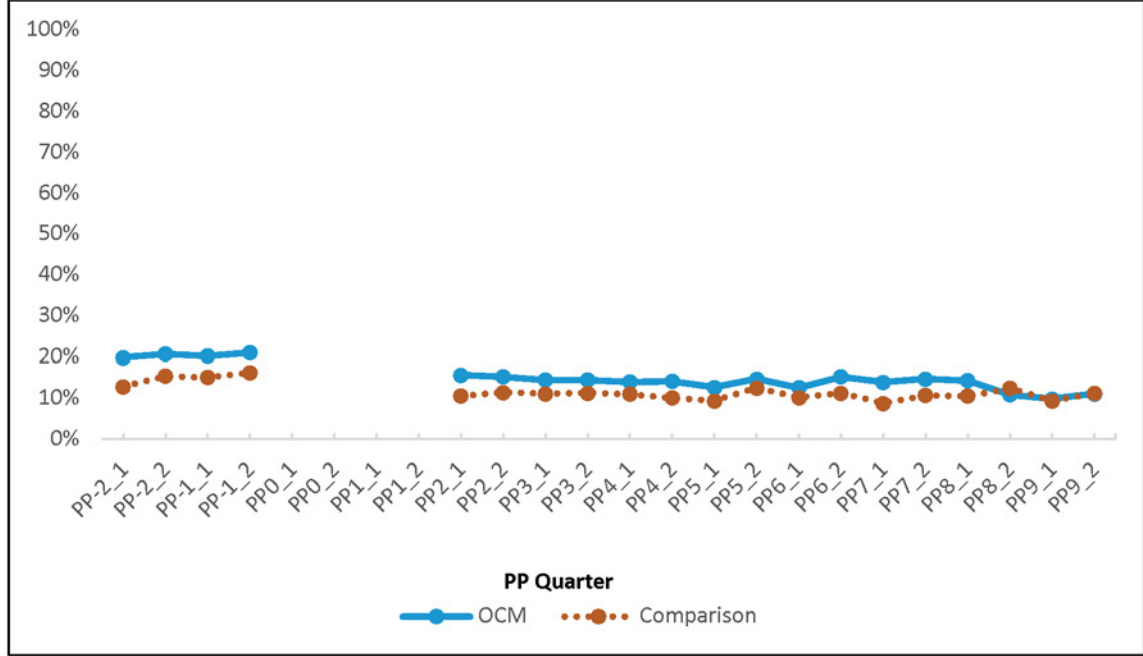
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: -0.6% per quarter (95% CI: -1.7%, 0.5%), P=0.303. GCSF: white blood cell growth factor.

Exhibit SC-39: Use of Prophylactic GCSF for Colorectal Cancer – Intermediate-Risk Regimens by Quarter, Unadjusted
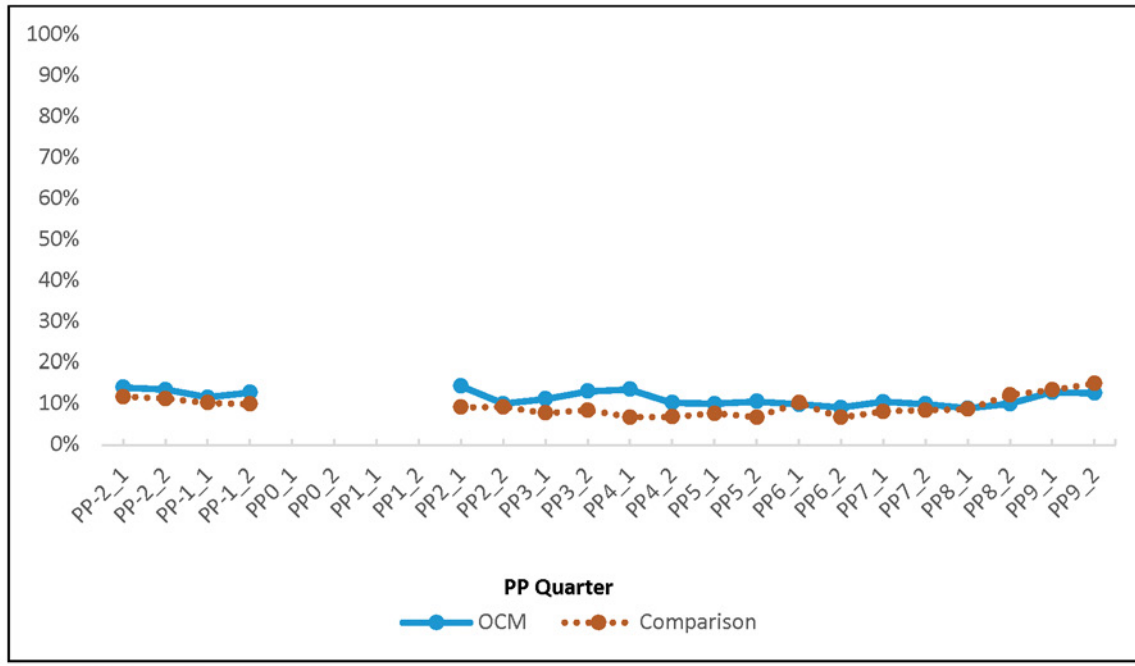
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.6% per quarter (95% CI: -1.1%; 2.3%), P=0.504. GCSF: white blood cell growth factor.

Exhibit SC-40: Use of Prophylactic GCSF Use for Colorectal Cancer – Low-Risk Regimens by Quarter, Unadjusted
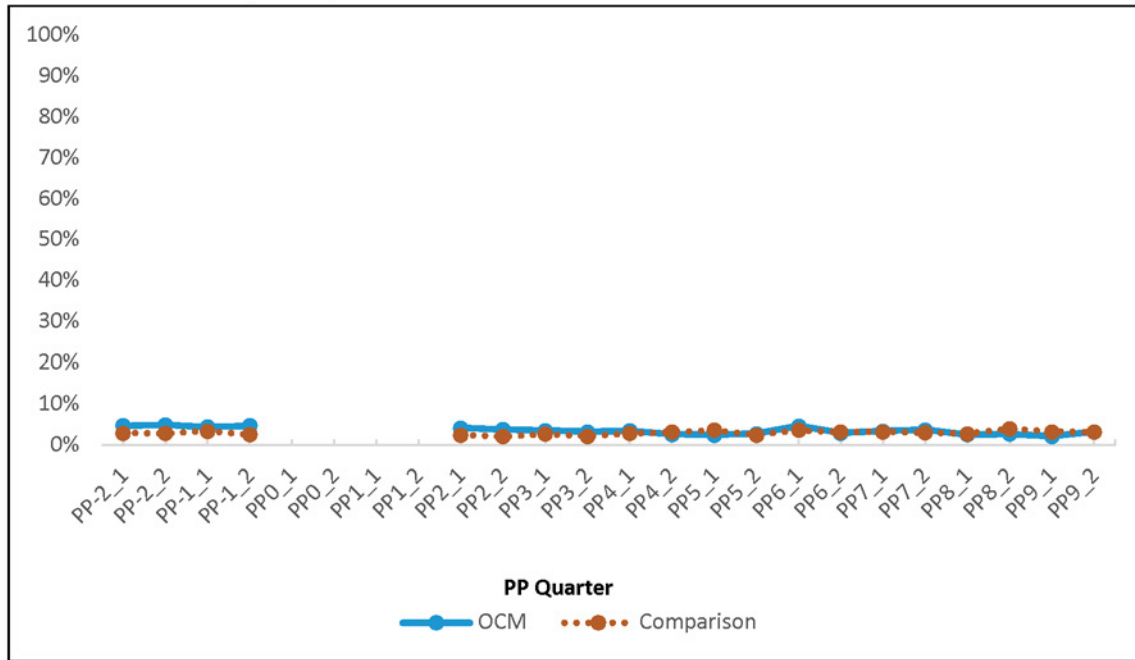
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.0% per quarter (95% CI: -0.8%, 0.9%), P=0.985. GCSF: white blood cell growth factor.

Exhibit SC-41: Relative Increases in Use of Filgrastim versus Pegfilgrastim for OCM Increased Over Time

Measure	DID Impact PP 1–9	90% CI	DID Impact PP1–3	90% CI	DID Impact PP4–6	90% CI	DID Impact PP7-9	90% CI
Filgrastim vs pegfilgrastim	2.7%	1.2%, 4.3%	1.6%	0.3%, 3.0%	2.8%	0.9%, 4.6%	4.1%	2.3%, 6.0%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014–2021.
Notes: DID: Difference-in-differences. PP: Performance period. CI: Confidence interval.

Exhibit SC-42: Proportion of Episodes with Filgrastim Use, among Those with Either Filgrastim or Pegfilgrastim, by Quarter, Unadjusted
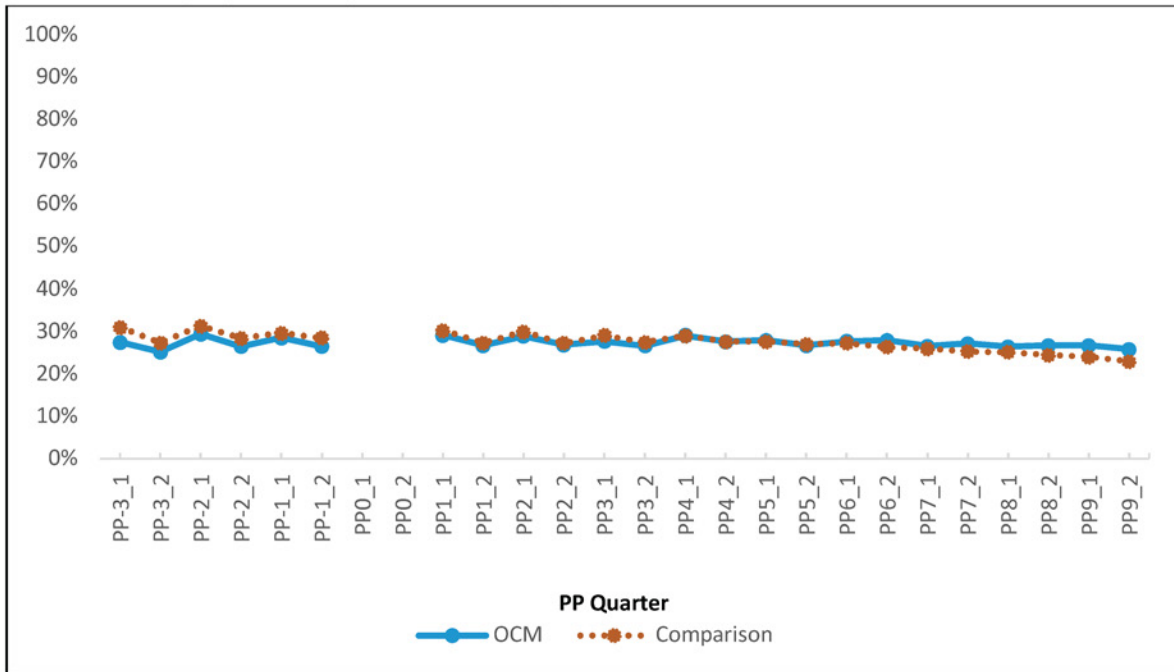
Source: Medicare claims 2014–2021.
Notes: OCM quarterly trend versus comparison group trend: 0.4% per quarter (95% CI: 0.0%, 0.8%), P=0.05.

Exhibit SC-43: Proportion of Episodes with Biosimilar Filgrastim Use, among Those with Biosimilar or Originator Filgrastim, by Quarter, Unadjusted
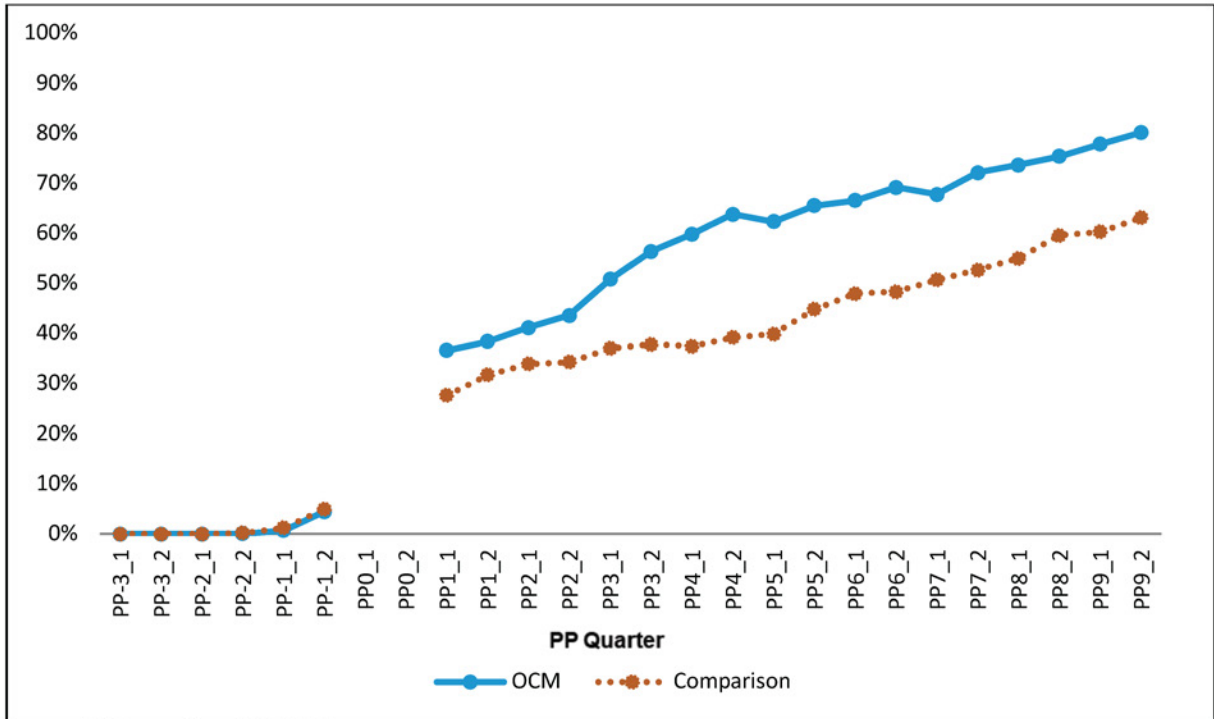
Source: Medicare claims 2014–2021

Exhibit SC-44: Proportion of Episodes with On-Body Injector Use Among Episodes with Pegfilgrastim Use, by Quarter, Unadjusted
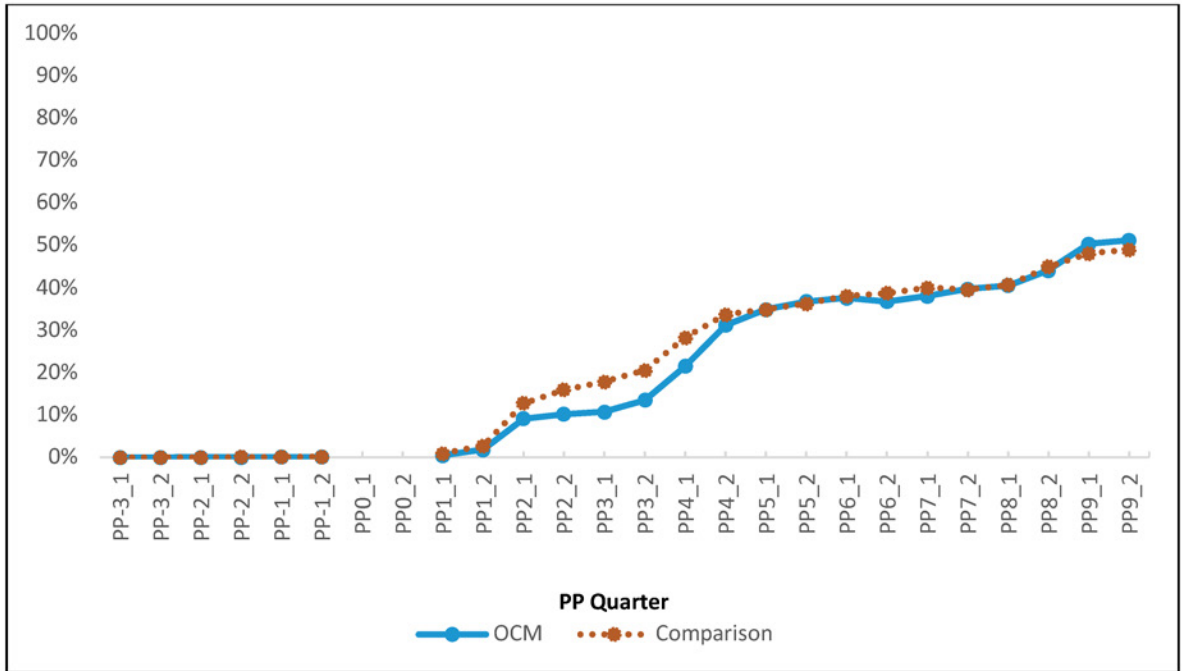
Source: Medicare claims 2014–2021.
Notes: On-body injectors were not available in the baseline period, so there was no use.

SD.1 Composite Measures of Patient-Reported Care Experience

Exhibit SD-1: No Meaningful Changes over Time in Adjusted Composite Measures of Quality of Care

Period	Composite Measures (scale 0–10), All OCM Respondents						
	Shared Decision Making	Access to Care	Affective Communication	Exchange of Information	Self-Management	Symptom Management	Overall Rating of Cancer Team
N	168,593	172,240	170,818	169,592	168,569	85,201	164,146
Linear time trend	0.015	0.006	0.004	0.000	0.006	-0.013	0.001
Baseline period mean							
4/16-9/16	7.46	8.88	9.02	8.50	5.92	7.32	9.28
Intervention period means							
7/16-12/16	7.40	8.79	8.98	8.42	5.85	7.19	9.24
10/16-3/17	7.31	8.78	8.93	8.36	5.91	7.33	9.27
1/17-6/17	7.44	8.78	8.93	8.40	5.88	7.27	9.21
4/17-9/17	7.48	8.79	8.98	8.44	5.90	7.21	9.23
7/17-12/17	7.47	8.83	8.95	8.50	5.99	7.31	9.19
10/17-3/18	7.55	8.87	8.99	8.44	5.83	7.19	9.25
1/18-6/18	7.37	8.79	8.98	8.39	5.92	7.15	9.25
4/18-9/18	7.47	8.86	9.04	8.46	6.06	7.24	9.25
7/18-12/18	7.49	8.85	8.99	8.35	5.91	7.06	9.27
10/18-3/19	7.53	8.86	9.01	8.40	5.93	7.06	9.27
1/19-6/19	7.58	8.89	9.06	8.48	6.02	7.18	9.32
4/19-9/19	7.48	8.87	9.01	8.52	5.94	7.12	9.25
7/19-12/19	7.71	8.92	9.01	8.43	6.06	7.29	9.27
10/19-3/20	7.69	8.90	9.01	8.43	5.91	7.08	9.29
1/20-6/20	7.52	8.86	9.00	8.38	5.84	7.03	9.20
4/20-9/20	7.37	8.86	8.98	8.36	5.86	6.95	9.16
7/20-12/20	7.18	8.94	9.02	8.42	5.80	6.97	9.25

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: OCM Patient and Caregiver Surveys, April 2016–December 2020.
Notes: The dates in the exhibit indicate the range of episode start dates included in each survey wave. OCM episodes lasted for 180 days, and patients typically received surveys roughly 6-9 months following the start of their episode. Estimates were weighted for sampling and nonresponse weights and adjusted for demographic characteristics, health status, cancer type and treatment duration, the calendar month when the episode was triggered, practice characteristics, and the incidence and prevalence of COVID-19 cases and deaths during each episode. Patients with a COVID-19 diagnosis during the episode were excluded from analysis.

Exhibit SD-2: No Meaningful Changes over Time in Adjusted Composite Measures of Quality of Care for Higher-Risk Episodes

Period	Composite Measures (scale 0–10), Higher-Risk Episodes						
	Shared Decision Making	Access to Care	Affective Communication	Exchange of Information	Self-Management	Symptom Management	Overall Rating of Cancer Team
N	117,731	120,667	119,765	119,237	118,471	72,627	114,996
Linear time trend	0.014	0.004	0.001	0.001	0.001	-0.012	0.000
Baseline period mean							
4/16-9/16	7.42	9.01	9.04	8.62	6.48	7.52	9.26
Intervention period means							
7/16-12/16	7.44	8.97	9.08	8.58	6.40	7.47	9.30
10/16-3/17	7.34	8.93	9.00	8.53	6.50	7.60	9.31
1/17-6/17	7.48	8.95	8.98	8.53	6.44	7.54	9.22
4/17-9/17	7.51	8.96	8.98	8.58	6.44	7.42	9.22
7/17-12/17	7.56	9.03	9.04	8.68	6.57	7.43	9.24
10/17-3/18	7.56	9.02	9.04	8.62	6.40	7.43	9.25
1/18-6/18	7.34	8.98	9.03	8.57	6.45	7.45	9.28
4/18-9/18	7.56	9.01	9.08	8.66	6.62	7.47	9.26
7/18-12/18	7.52	9.02	9.04	8.49	6.46	7.34	9.31
10/18-3/19	7.53	8.98	9.01	8.53	6.47	7.30	9.24
1/19-6/19	7.59	9.03	9.09	8.59	6.49	7.40	9.28
4/19-9/19	7.55	9.04	9.07	8.70	6.52	7.41	9.25
7/19-12/19	7.71	9.04	9.07	8.63	6.60	7.54	9.29
10/19-3/20	7.65	9.02	9.01	8.57	6.38	7.31	9.30
1/20-6/20	7.53	8.98	9.00	8.50	6.33	7.29	9.22
4/20-9/20	7.31	8.95	8.92	8.52	6.18	7.19	9.10
7/20-12/20	7.14	9.02	8.89	8.51	6.13	7.12	9.22

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
Source: OCM Patient and Caregiver Surveys, April 2016–December 2020.
Notes: The dates in the exhibit indicate the range of episode start dates included in each survey wave. OCM episodes lasted for 180 days, and patients typically received surveys roughly 6-9 months following the start of their episode. Estimates were weighted for sampling and nonresponse weights and adjusted for demographic characteristics, health status, cancer type and treatment duration, the calendar month when the episode was triggered, practice characteristics, and the incidence and prevalence of COVID-19 cases and deaths during each episode. Patients with a COVID-19 diagnosis during the episode were excluded from analysis.

Exhibit SD-3: No Meaningful Changes over Time in Adjusted Composite Measures of Quality of Care for Lower-Risk Episodes

Period	Composite Measures (scale 0–10), Lower-Risk Episodes						
	Shared Decision Making	Access to Care	Affective Communication	Exchange of Information	Self-Management	Symptom Management	Overall Rating of Cancer Team
N	50,862	51,573	51,053	50,355	50,098	12,574	49,150
Linear time trend	0.015	0.012	0.010	-0.001	0.018	-0.014	0.004
Baseline period mean							
4/16-9/16	7.55	8.54	8.97	8.18	4.51	5.99	9.32
Intervention period means							
7/16-12/16	7.32	8.35	8.71	8.00	4.45	5.50	9.11
10/16-3/17	7.29	8.41	8.77	7.95	4.44	5.82	9.20
1/17-6/17	7.35	8.38	8.80	8.03	4.44	5.70	9.21
4/17-9/17	7.42	8.37	8.97	8.10	4.52	5.91	9.25
7/17-12/17	7.26	8.33	8.76	8.03	4.50	6.44	9.11
10/17-3/18	7.55	8.50	8.87	8.01	4.42	5.83	9.24
1/18-6/18	7.43	8.34	8.86	7.95	4.58	5.47	9.18
4/18-9/18	7.23	8.50	8.95	7.95	4.66	5.89	9.23
7/18-12/18	7.39	8.39	8.85	7.95	4.49	5.32	9.15
10/18-3/19	7.51	8.53	9.01	8.05	4.55	5.61	9.32
1/19-6/19	7.57	8.53	9.00	8.19	4.79	5.79	9.38
4/19-9/19	7.32	8.44	8.85	8.06	4.47	5.46	9.27
7/19-12/19	7.75	8.60	8.85	7.93	4.72	5.92	9.19
10/19-3/20	7.75	8.63	9.03	8.07	4.73	5.81	9.26
1/20-6/20	7.49	8.56	8.97	8.09	4.56	5.53	9.10
4/20-9/20	7.55	8.68	9.16	8.00	5.08	5.43	9.35
7/20-12/20	7.37	8.77	9.37	8.26	4.97	5.97	9.30

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
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Notes: The dates in the exhibit indicate the range of episode start dates included in each survey wave. OCM episodes lasted for 180 days, and patients typically received surveys roughly 6-9 months following the start of their episode. Estimates were weighted for sampling and nonresponse weights and adjusted for demographic characteristics, health status, cancer type and treatment duration, the calendar month when the episode was triggered, practice characteristics, and the incidence and prevalence of COVID-19 cases and deaths during each episode. Patients with a COVID-19 diagnosis during the episode were excluded from analysis.

SD.2 Patient-Reported Onset and Management of Symptoms

D.2.1 Prevalence of Patient-Reported Symptoms (Not Bothered by Symptoms)

Exhibit SD-4: Patient-Reported Symptoms Improved Slightly over Time for OCM Patients

Period	Not Bothered by Symptoms, All OCM Respondents							
	Pain	Energy Level	Emotional Problems	Nausea	Breathing	Coughing	Constipation or Diarrhea	Neuropathy
N	165,652	166,528	165,886	164,950	165,417	165,124	166,664	165,682
Linear time trend	0.1%	0.2%	0.1%	0.1%	0.1%	0.2%	0.2%	0.0%
Baseline period mean								
4/16-9/16	45.4%	23.2%	50.1%	66.6%	71.5%	74.8%	38.7%	53.1%
Intervention period means								
7/16-12/16	43.9%	21.5%	48.2%	66.3%	71.8%	74.9%	38.7%	53.2%
10/16-3/17	44.6%	22.7%	51.1%	64.0%	71.2%	73.7%	39.7%	53.7%
1/17-6/17	45.4%	22.2%	48.4%	64.5%	71.6%	73.1%	38.3%	53.8%
4/17-9/17	45.3%	26.3%	51.6%	67.9%	74.2%	77.4%	41.5%	52.7%
7/17-12/17	45.7%	24.7%	50.5%	66.1%	71.5%	76.2%	38.3%	51.6%
10/17-3/18	46.9%	24.4%	52.1%	67.6%	73.3%	75.5%	41.0%	53.8%
1/18-6/18	44.8%	22.6%	50.5%	66.5%	73.1%	74.1%	39.5%	54.1%
4/18-9/18	46.5%	24.7%	49.5%	66.4%	74.1%	73.9%	41.0%	54.1%
7/18-12/18	47.9%	23.8%	51.4%	68.7%	72.7%	75.5%	41.0%	55.0%
10/18-3/19	44.8%	23.4%	50.2%	67.1%	70.6%	75.2%	40.9%	54.7%
1/19-6/19	47.2%	24.5%	50.8%	66.6%	71.7%	75.1%	40.7%	54.7%
4/19-9/19	45.9%	25.1%	50.9%	67.3%	72.8%	76.0%	41.5%	53.5%
7/19-12/19	46.8%	27.4%	52.2%	68.6%	74.5%	77.3%	40.8%	53.3%
10/19-3/20	45.7%	25.5%	52.1%	67.1%	75.6%	78.4%	41.9%	53.8%
1/20-6/20	45.0%	22.1%	48.8%	65.8%	72.8%	79.0%	39.7%	50.3%
4/20-9/20	48.1%	27.3%	54.0%	70.4%	76.7%	76.3%	40.9%	55.9%
7/20-12/20	45.7%	26.8%	54.5%	71.1%	73.3%	78.1%	41.6%	51.8%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: OCM Patient and Caregiver Surveys, April 2016–December 2020.
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Exhibit SD-5: Patient-Reported Symptoms Improved Slightly over Time, Patients with Higher-Risk Episodes

Period	Not Bothered by Symptoms, Higher-Risk Episodes							
	Pain	Energy Level	Emotional Problems	Nausea	Breathing	Coughing	Constipation or Diarrhea	Neuropathy
N	116,453	117,195	116,472	115,984	116,251	115,989	117,345	116,511
Linear time trend	0.1%	0.2%	0.1%	0.1%	0.2%	0.2%	0.2%	0.1%
Baseline period mean								
4/16-9/16	40.0%	15.1%	46.1%	58.3%	65.3%	69.8%	27.4%	46.2%
Intervention period means								
7/16-12/16	39.0%	14.8%	44.7%	57.5%	66.5%	69.8%	28.5%	47.6%
10/16-3/17	37.1%	13.3%	46.1%	55.4%	64.4%	67.7%	27.7%	46.2%
1/17-6/17	39.0%	16.5%	43.1%	55.6%	65.8%	67.9%	27.0%	47.3%
4/17-9/17	38.5%	18.0%	45.8%	59.7%	68.2%	72.8%	29.4%	44.7%
7/17-12/17	38.3%	17.0%	44.6%	57.9%	65.0%	70.5%	27.6%	45.8%
10/17-3/18	40.9%	16.6%	48.2%	58.9%	66.6%	70.8%	30.1%	47.9%
1/18-6/18	39.7%	15.4%	45.8%	59.0%	68.0%	69.8%	29.5%	49.8%
4/18-9/18	41.1%	16.6%	44.8%	58.1%	68.6%	68.8%	30.4%	47.8%
7/18-12/18	41.6%	15.7%	46.7%	60.9%	66.8%	70.8%	30.9%	48.8%
10/18-3/19	38.2%	17.0%	44.5%	59.6%	64.1%	70.3%	30.0%	48.6%
1/19-6/19	40.7%	17.1%	46.4%	58.7%	65.5%	69.8%	29.5%	48.2%
4/19-9/19	40.3%	16.4%	46.6%	58.1%	66.9%	70.8%	29.3%	46.5%
7/19-12/19	40.2%	20.1%	48.0%	59.5%	68.3%	72.7%	30.3%	47.4%
10/19-3/20	40.2%	18.1%	47.1%	58.3%	70.2%	74.0%	30.8%	48.5%
1/20-6/20	40.0%	15.6%	45.2%	57.6%	67.5%	75.7%	29.4%	44.5%
4/20-9/20	43.5%	19.6%	51.1%	62.4%	71.0%	71.6%	30.2%	49.7%
7/20-12/20	42.3%	20.0%	51.1%	62.1%	67.4%	74.7%	32.7%	47.4%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
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Exhibit SD-6: Minimal Change in Patient-Reported Symptoms over Time, OCM Patients with Lower-Risk Episodes

Period	Not Bothered by Symptoms, Lower-Risk Episodes							
	Pain	Energy Level	Emotional Problems	Nausea	Breathing	Coughing	Constipation or Diarrhea	Neuropathy
N	49,199	49,333	49,414	48,966	49,166	49,122	49,319	49,171
Linear time trend	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	-0.1%
Baseline period mean								
4/16-9/16	58.7%	43.4%	60.2%	87.9%	87.0%	87.2%	67.1%	69.9%
Intervention period means								
7/16-12/16	56.8%	39.0%	57.2%	88.9%	85.8%	88.2%	65.2%	67.7%
10/16-3/17	63.2%	45.9%	63.8%	86.5%	88.6%	88.4%	70.6%	73.3%
1/17-6/17	61.5%	37.2%	61.4%	87.2%	86.5%	86.4%	67.5%	70.3%
4/17-9/17	61.9%	47.2%	65.9%	88.7%	89.2%	89.3%	71.9%	72.2%
7/17-12/17	64.0%	44.7%	64.8%	87.7%	88.2%	90.3%	66.3%	67.0%
10/17-3/18	62.1%	44.2%	62.1%	89.2%	89.9%	87.5%	68.1%	68.2%
1/18-6/18	58.5%	40.9%	62.2%	85.1%	86.4%	85.4%	65.3%	65.5%
4/18-9/18	61.1%	45.4%	61.6%	87.4%	87.9%	87.3%	67.9%	70.2%
7/18-12/18	63.9%	44.5%	63.6%	88.1%	87.8%	87.7%	66.3%	70.7%
10/18-3/19	61.6%	39.7%	65.0%	86.0%	87.1%	87.3%	68.3%	69.8%
1/19-6/19	63.8%	43.8%	61.6%	87.0%	87.3%	88.6%	69.7%	71.4%
4/19-9/19	59.5%	46.8%	61.6%	90.8%	87.5%	89.2%	73.4%	71.3%
7/19-12/19	63.6%	45.9%	63.1%	91.7%	90.0%	88.7%	67.3%	68.3%
10/19-3/20	58.8%	43.8%	65.1%	89.3%	88.9%	89.3%	69.9%	66.2%
1/20-6/20	57.1%	38.1%	57.5%	87.2%	87.1%	86.5%	65.1%	63.7%
4/20-9/20	60.0%	47.6%	61.4%	90.4%	90.8%	87.6%	67.7%	72.2%
7/20-12/20	54.5%	44.7%	63.3%	92.3%	87.3%	85.6%	63.5%	62.7%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
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Exhibit SD-7: Small Decline in Patient Perceptions of Their Cancer Care Team's Management of Some Symptoms, All Patients

Period	Cancer Therapy Team Tried to Help Deal with Symptoms, All OCM Respondents							
	Pain	Energy Level	Emotional Problems	Nausea	Breathing	Coughing	Constipation or Diarrhea	Neuropathy
N	88,534	125,687	79,780	53,535	44,242	40,082	97,858	74,371
Linear time trend	-0.2%	0.0%	0.0%	0.0%	-0.2%	-0.3%	-0.2%	-0.1%
Baseline period mean								
4/16-9/16	75.3%	52.7%	44.2%	81.0%	58.5%	48.3%	67.1%	49.0%
Intervention period means								
7/16-12/16	74.8%	49.8%	45.6%	80.1%	57.3%	57.1%	64.5%	47.6%
10/16-3/17	74.5%	49.0%	45.3%	78.3%	59.7%	53.5%	69.2%	47.9%
1/17-6/17	75.6%	50.9%	47.7%	80.2%	57.7%	53.0%	69.2%	45.6%
4/17-9/17	71.8%	50.8%	46.6%	78.9%	54.2%	48.9%	65.5%	44.9%
7/17-12/17	73.5%	51.5%	47.1%	77.7%	60.0%	54.5%	67.5%	49.5%
10/17-3/18	75.0%	49.5%	43.6%	81.0%	53.4%	52.1%	65.7%	47.6%
1/18-6/18	73.2%	49.7%	44.5%	78.7%	55.8%	48.5%	64.6%	47.9%
4/18-9/18	73.8%	52.5%	46.1%	80.4%	58.3%	49.0%	67.3%	48.0%
7/18-12/18	71.7%	48.8%	43.1%	79.9%	54.2%	47.2%	66.2%	44.9%
10/18-3/19	72.3%	49.1%	44.0%	80.4%	55.6%	47.5%	66.5%	44.0%
1/19-6/19	72.7%	52.2%	44.0%	81.3%	57.4%	48.1%	65.3%	46.6%
4/19-9/19	71.8%	49.5%	44.3%	80.4%	54.4%	51.3%	65.7%	49.1%
7/19-12/19	74.3%	52.3%	49.1%	80.4%	61.1%	48.7%	65.9%	47.8%
10/19-3/20	73.9%	49.7%	45.5%	78.1%	51.7%	47.3%	64.8%	47.2%
1/20-6/20	68.3%	49.4%	41.8%	74.6%	53.6%	51.4%	62.4%	44.4%
4/20-9/20	70.0%	47.1%	44.4%	78.2%	47.3%	41.6%	58.8%	43.6%
7/20-12/20	71.0%	47.5%	44.6%	74.8%	43.1%	47.4%	55.0%	43.8%

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading.
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Notes: The dates in the exhibit indicate the range of episode start dates included in each survey wave. OCM episodes lasted for 180 days, and patients typically received surveys roughly 6-9 months following the start of their episode. Estimates were weighted for sampling and nonresponse weights and adjusted for demographic characteristics, health status, cancer type and treatment duration, the calendar month when the episode was triggered, practice characteristics, and the incidence and prevalence of COVID-19 cases and deaths during each episode. Patients with a COVID-19 diagnosis during the episode were excluded from analysis.

Exhibit SD-8: Small Decline in Patient Perceptions of Their Cancer Care Team's Management of Some Symptoms, Patients with Higher-Risk Episodes

Period	Cancer Therapy Team Tried to Help Deal with Symptoms, Higher-Risk Episodes							
	Pain	Energy Level	Emotional Problems	Nausea	Breathing	Coughing	Constipation or Diarrhea	Neuropathy
N	69,521	97,666	61,831	47,945	38,497	34,217	82,341	59,790
Linear time trend	-0.3%	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.2%	-0.1%
Baseline period mean								
4/16-9/16	79.0%	54.0%	44.7%	82.8%	60.1%	49.9%	70.8%	52.1%
Intervention period means								
7/16-12/16	78.6%	52.5%	47.3%	82.7%	59.4%	61.2%	68.5%	51.4%
10/16-3/17	78.9%	51.4%	47.9%	80.4%	62.6%	56.0%	72.9%	52.1%
1/17-6/17	78.9%	54.0%	51.4%	81.6%	60.5%	55.5%	73.7%	48.6%
4/17-9/17	75.6%	53.1%	47.2%	81.3%	57.8%	50.6%	69.3%	48.4%
7/17-12/17	76.9%	53.5%	47.1%	78.2%	62.1%	55.1%	70.2%	51.4%
10/17-3/18	77.8%	52.5%	45.2%	82.5%	56.5%	56.7%	69.8%	51.5%
1/18-6/18	77.7%	52.6%	46.4%	81.3%	57.1%	50.0%	68.3%	51.7%
4/18-9/18	76.9%	55.3%	46.4%	82.2%	60.9%	52.1%	70.6%	51.4%
7/18-12/18	76.1%	50.9%	45.1%	82.0%	56.8%	49.5%	70.3%	48.9%
10/18-3/19	75.1%	51.7%	45.6%	82.1%	57.1%	50.1%	69.8%	48.0%
1/19-6/19	74.9%	53.9%	45.4%	82.4%	59.1%	50.1%	68.6%	49.9%
4/19-9/19	76.0%	52.2%	46.8%	82.5%	57.8%	55.8%	69.3%	52.8%
7/19-12/19	78.4%	54.7%	49.9%	83.0%	64.8%	53.9%	69.1%	52.3%
10/19-3/20	76.2%	51.6%	47.6%	80.9%	54.3%	50.4%	67.9%	50.1%
1/20-6/20	71.8%	52.2%	44.3%	77.7%	55.4%	55.0%	65.9%	47.6%
4/20-9/20	70.9%	49.7%	47.5%	81.7%	48.1%	44.9%	61.4%	45.1%
7/20-12/20	72.1%	50.1%	50.5%	79.0%	44.7%	53.9%	57.0%	44.8%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: OCM Patient and Caregiver Surveys, April 2016–December 2020.
Notes: The dates in the exhibit indicate the range of episode start dates included in each survey wave. OCM episodes lasted for 180 days, and patients typically received surveys roughly 6-9 months following the start of their episode. Estimates were weighted for sampling and nonresponse weights and adjusted for demographic characteristics, health status, cancer type and treatment duration, the calendar month when the episode was triggered, practice characteristics, and the incidence and prevalence of COVID-19 cases and deaths during each episode. Patients with a COVID-19 diagnosis during the episode were excluded from analysis.

Exhibit SD-9: Decline in Patient Perceptions of Their Cancer Care Team's Management of Breathing and Coughing, Patients with Lower-Risk Episodes

Period	Cancer Therapy Team Tried to Help Deal with Symptoms, Lower-Risk Episodes							
	Pain	Energy Level	Emotional Problems	Nausea	Breathing	Coughing	Constipation or Diarrhea	Neuropathy
N	19,005	28,021	17,949	5,570	5,745	5,865	15,517	14,581
Linear time trend	0.0%	-0.1%	-0.1%	-0.1%	-0.5%	-0.8%	0.2%	-0.2%
Baseline period mean								
4/16-9/16	60.2%	47.0%	42.0%	62.9%	45.2%	39.8%	45.8%	35.5%
Intervention period means								
7/16-12/16	60.2%	39.5%	39.6%	57.3%	43.4%	29.6%	40.4%	31.4%
10/16-3/17	57.6%	40.2%	37.6%	59.6%	42.3%	39.0%	48.4%	30.5%
1/17-6/17	62.7%	39.3%	35.6%	63.4%	40.0%	38.8%	44.6%	32.6%
4/17-9/17	57.4%	41.6%	43.8%	57.2%	29.8%	37.6%	43.7%	28.5%
7/17-12/17	58.7%	44.1%	44.9%	68.0%	44.2%	46.9%	50.5%	39.9%
10/17-3/18	64.0%	38.8%	38.7%	66.1%	31.4%	24.7%	43.3%	32.5%
1/18-6/18	56.0%	39.6%	38.4%	58.0%	47.9%	36.5%	45.1%	32.9%
4/18-9/18	61.3%	42.3%	45.5%	63.9%	39.5%	30.7%	49.3%	34.0%
7/18-12/18	53.1%	40.8%	36.4%	59.7%	39.2%	34.0%	44.0%	26.6%
10/18-3/19	61.4%	39.0%	38.2%	65.5%	42.9%	33.7%	46.8%	26.8%
1/19-6/19	63.7%	44.7%	38.3%	69.2%	43.9%	36.1%	46.9%	32.4%
4/19-9/19	56.6%	39.6%	35.6%	66.3%	32.5%	25.8%	46.3%	33.5%
7/19-12/19	58.0%	43.0%	46.5%	55.9%	32.9%	19.0%	48.6%	27.8%
10/19-3/20	65.3%	42.7%	38.7%	52.1%	33.1%	26.8%	48.6%	35.0%
1/20-6/20	53.7%	38.6%	32.5%	46.4%	33.4%	30.5%	42.4%	27.8%
4/20-9/20	66.7%	37.8%	33.9%	49.9%	37.3%	24.8%	42.2%	36.2%
7/20-12/20	66.4%	37.8%	25.0%	45.6%	36.7%	12.5%	42.2%	37.4%

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: OCM Patient and Caregiver Surveys, April 2016–December 2020.
Notes: The dates in the exhibit indicate the range of episode start dates included in each survey wave. OCM episodes lasted for 180 days, and patients typically received surveys roughly 6-9 months following the start of their episode. Estimates were weighted for sampling and nonresponse weights and adjusted for demographic characteristics, health status, cancer type and treatment duration, the calendar month when the episode was triggered, practice characteristics, and the incidence and prevalence of COVID-19 cases and deaths during each episode. Patients with a COVID-19 diagnosis during the episode were excluded from analysis.

Exhibit SD-10: OCM Practices Reported Improvements in Pain Screening and Management and in Depression Screening and Follow-Up

Quality Measure	Average Performance Rate Across OCM Practices							
	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9
All practices (n=190 reporting in any PP)								
Number of practices submitting practice-reported quality measures	n=183	n=182	n=179	n=173	n=172	n=125	n=118	n=114
Pain assessment and management	77.6	80.7	84.1	86.9	87.1	88.2	89.8	88.8
Depression screening and follow-up plan	57.7	64.0	64.9	71.1	70.9	73.5	75.0	77.9
Practices reporting in all PPs from PP2 through PP9 (n=104)								
Pain assessment and management	79.8	83.4	87.2	89.5	91.0	92.6	93.2	92.6
Depression screening and follow-up plan	57.8	65.3	68.5	73.5	77.0	77.5	78.2	81.5
Practices active in PP9 that did not report in all performance periods (n=30 practices reporting in any PP)								
Pain assessment and management	72.4	78.8	75.4	81.2	75.4	68.9	80.7	62.6
Depression screening and follow-up plan	55.5	60.8	56.8	62.2	61.6	57.1	68.5	53.8
7/20-12/20	66.4%	37.8%	25.0%	45.6%	36.7%	12.5%	42.2%	37.4%

Shading indicates estimates were significantly greater than the mean performance rate in PP2 (p≤0.05).
Source: OCM quality measure data reported to CMS by participating practices.
Notes: The sample sizes do not always match across practice cohorts and performance periods due to practice terminations over time, and because not all practices submitted the practice-reported measures in all PPs. PP: performance period.

This section lists exhibits not included in the main report: (1) sample size associated with each outcome, (2) estimated baseline differences between each underserved population and their reference population, for both OCM and comparison groups, with reduced risk adjustment, and (3) trends in use of immunotherapy.

SE. Supporting Analyses for Health Equity Impacts

SE.1 Minimally Risk-Adjusted Baseline Estimates

Exhibit SE-1: Baseline Differences in Payment Outcomes Using Reduced Risk Adjustment Model: Black Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Black	White	Difference	Black	White	Difference	
TEP without MEOS	$30,905	$28,764	$2141 (7.4%)	$30,337	$28,439	$1898 (6.7%)	$243
Part B chemotherapy payments	$7,254	$7,911	-$657 (-8.3%)	$6,936	$7,572	-$636 (-8.4%)	-$21
Part B non-chemotherapy drug payments	$2,875	$2,846	$28 (1.0%)	$2,366	$2,529	-$163 (-6.5%)	$191
Part D payments	$8,940	$6,217	$2723 (43.8%)	$9,107	$6,313	$2793 (44.2%)	-$70

Source: Medicare claims 2014-2021.
Notes: We did not conduct tests for the statistical significance of baseline differences for the claims-based measures of utilization and payment because of the large sample sizes. TEP: Total episode payment. MEOS: Monthly Enhanced Oncology Services. OCM: OCM intervention group. COMP: Comparison group.

Exhibit SE-2: Baseline Differences in Payment Outcomes Using Reduced Risk Adjustment Model: Hispanic Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM -Comp
	Hispanic	White	Difference	Hispanic	White	Difference	
TEP without MEOS	$30,806	$28,764	$2,042 (7.1%)	$30,932	$28,439	$2493 (8.8%)	-$451
Part B chemotherapy payments	$7,177	$7,911	-$734 (-9.3%)	$6,863	$7,572	-$709 (-9.4%)	-$25
Part B non-chemotherapy drug payments	$2,469	$2,846	-$377 (-13.2%)	$2,341	$2,529	-$189 (-7.5%)	-$188
Part D payments	$9,156	$6,217	$2,939 (47.3%)	$9,319	$6,313	$3006 (47.6%)	-$67

Source: Medicare claims 2014-2021.
Notes: We did not conduct tests for the statistical significance of baseline differences for the claims-based measures of utilization and payment because of the large sample sizes. TEP: Total episode payment. MEOS: Monthly Enhanced Oncology Services. OCM intervention group. COMP: Comparison group.

Exhibit SE-3: Baseline Differences in Payment Outcomes Using Reduced Risk Adjustment Model: Dual-Eligible Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Dual	Non-Dual	Difference	Dual	Non-Dual	Difference	
TEP without MEOS	$34,310	$28,216	$6,093 (21.6%)	$33,966	$27,909	$6,056 (21.7%)	$37
Part B chemotherapy payments	$6,692	$7,821	-$1,128 (-14.4%)	$6,547	$7,697	-$1,150 (-15.0%)	$22
Part B non-chemotherapy drug payments	$2,404	$2,903	-$499 (-17.2%)	$2,137	$2,566	-$429 (-16.7%)	-$70
Part D payments	$10,446	$5,869	$4,577 (78.0%)	$10,469	$6,050	$4,419 (73.0%)	$158

Source: Medicare claims 2014-2021.
Notes: We did not conduct tests for the statistical significance of baseline differences for the claims-based measures of utilization and payment because of the large sample sizes. TEP: Total episode payment. MEOS: Monthly Enhanced Oncology Services. OCM intervention group. COMP: Comparison group.

Exhibit SE-4: Baseline Differences in Utilization Outcomes Using Reduced Risk Adjustment Model: Black Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Black	White	Difference	Black	White	Difference	
Occurrence of total ED visit	41.7%	35.4%	6.3pp (17.7%)	41.9%	34.8%	7.0pp (20.2%)	-0.7pp
Number of total ED visits	0.87	0.65	0.22 (33.2%)	0.87	0.63	0.24 (38.2%)	-0.02
Occurrence of an inpatient stay	29.4%	27.0%	2.4pp (9.0%)	28.7%	25.9%	2.8pp (10.8%)	-0.4pp
Number of inpatient stays	0.49	0.43	0.06 (13.1%)	0.47	0.40	0.06 (15.8%)	0.00
Occurrence of 30-day readmission	27.9%	24.7%	3.2pp (12.8%)	28.4%	24.1%	4.3pp (17.8%)	-1.1pp
Number of 30-day readmissions	0.43	0.36	0.07 (19.3%)	0.44	0.35	0.09 (27.2%)	-0.02
Occurrence of 30-day unplanned readmission	26.9%	23.3%	3.6pp (15.5%)	27.0%	22.7%	4.3pp (18.9%)	-0.7pp
Number of 30-day unplanned readmissions	0.40	0.33	0.07 (22.8%)	0.40	0.32	0.09 (27.9%)	-0.02
Occurrence of a home health service	20.0%	15.5%	4.5pp (28.8%)	18.9%	14.7%	4.2pp (28.4%)	0.3pp
Number of 60-day home health spells	0.41	0.28	0.13 (45.1%)	0.37	0.26	0.11 (43.7%)	0.02
Occurrence of a cancer-related E&M service	92.7%	92.8%	-0.1pp (-0.1%)	92.4%	92.8%	-0.4pp (-0.4%)	0.3pp
Number of cancer-related E&M services	5.12	5.27	-0.14 (-2.7%)	4.89	5.11	-0.22 (-4.3%)	0.08
Occurrence of a Part B outpatient therapy service	8.1%	8.6%	-0.5pp (-6.2%)	8.3%	9.0%	-0.7pp (-7.6%)	0.2pp
Number of Part B outpatient therapy services	1.73	1.77	-0.03 (-2.0%)	1.65	1.75	-0.10 (-5.6%)	0.07
Occurrence of ICU admission	10.9%	10.3%	0.5pp (5.3%)	10.3%	9.2%	1.0pp (11.1%)	-0.5pp

Source: Medicare claims 2014-2021.
Notes: For readmission related outcomes, sample was restricted to those with at least one hospitalization. We did not conduct tests for the statistical significance of baseline differences for the claims-based measures of utilization and payment because of the large sample sizes. pp: Percentage point. ED: Emergency department. E&M: Evaluation and management. ICU: Intensive care unit. OCM: OCM intervention group. COMP: Comparison group.

Exhibit SE-5: Baseline Differences in Utilization Outcomes Using Reduced Risk Adjustment Model: Hispanic Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Hispanic	White	Difference	Hispanic	White	Difference	
Occurrence of ED visit	39.5%	35.4%	4.1pp (11.5%)	38.4%	34.8%	3.5pp (10.2%)	0.6pp
Number of ED visits	0.79	0.65	0.13 (20.5%)	0.74	0.63	0.11 (17.6%)	0.02
Occurrence of an inpatient stay	28.3%	27.0%	1.3pp (4.9%)	26.8%	25.9%	0.8pp (3.2%)	0.5pp
Number of inpatient stays	0.46	0.43	0.03 (6.9%)	0.42	0.40	0.02 (4.1%)	0.01
Occurrence of 30-day readmission	27.4%	24.7%	2.7pp (11.0%)	26.4%	24.1%	2.3pp (9.7%)	0.4pp
Number of 30-day readmissions	0.42	0.36	0.06 (16.7%)	0.40	0.35	0.05 (14.4%)	0.01
Occurrence of 30-day unplanned readmission	26.2%	23.3%	2.9pp (12.6%)	25.3%	22.7%	2.6pp (11.3%)	0.3pp
Number of 30-day unplanned readmissions	0.39	0.33	0.06 (18.3%)	0.37	0.32	0.05 (16.2%)	0.01
Occurrence of a home health service	19.8%	15.5%	4.3pp (27.8%)	19.2%	14.7%	4.4pp (30.1%)	-0.1pp
Number of 60-day home health spells	0.42	0.28	0.14 (50.9%)	0.37	0.26	0.12 (44.7%)	0.02
Occurrence of a cancer-related E&M service	93.4%	92.8%	0.6pp (0.7%)	92.8%	92.8%	0.1pp (0.1%)	0.5pp
Number of cancer-related E&M services	5.49	5.27	0.22 (4.1%)	5.06	5.11	-0.05 (-0.9%)	0.27
Occurrence of a Part B outpatient therapy service	6.9%	8.6%	-1.7pp (-20.0%)	7.3%	9.0%	-1.7pp (-18.9%)	0.0pp
Number of Part B outpatient therapy services	1.33	1.77	-0.43 (-24.5%)	1.31	1.75	-0.44 (-25.3%)	0.01
Occurrence of ICU admission	10.7%	10.3%	0.4pp (3.8%)	10.3%	9.2%	1.1pp (11.4%)	-0.7pp

Source: Medicare claims 2014-2021.

Notes: For readmission related outcomes, sample was restricted to those with at least one hospitalization. We did not conduct tests for the statistical significance of baseline differences for the claims-based measures of utilization and payment because of the large sample sizes. pp: Percentage point. ED: Emergency department. E&M: Evaluation and management. ICU: Intensive care unit. OCM intervention group. COMP: Comparison group.

Exhibit SE-6: Baseline Differences in Utilization Outcomes Using Reduced Risk Adjustment Model: Dual-Eligible Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Dual	Non-Dual	Difference	Dual	Non-Dual	Difference	
Occurrence of ED visit	45.0%	34.5%	10.4pp (30.2%)	44.6%	33.8%	10.8pp (32.0%)	-0.4pp
Number of ED visits	1.00	0.62	0.38 (60.8%)	0.98	0.60	0.38 (64.0%)	0.00
Occurrence of an inpatient stay	31.8%	26.5%	5.3pp (20.0%)	30.7%	25.3%	5.4pp (21.2%)	-0.1pp
Number of inpatient stays	0.55	0.42	0.13 (31.9%)	0.52	0.39	0.13 (33.1%)	0.00
Occurrence of 30-day readmission	28.1%	24.7%	3.4pp (13.9%)	27.8%	23.9%	3.9pp (16.2%)	-0.5pp
Number of 30-day readmissions	0.44	0.36	0.08 (21.8%)	0.43	0.34	0.09 (25.1%)	-0.01
Occurrence of 30-day unplanned readmission	27.1%	23.2%	3.8pp (16.5%)	26.6%	22.5%	4.1pp (18.0%)	-0.3pp
Number of 30-day unplanned readmissions	0.41	0.33	0.08 (24.9%)	0.40	0.31	0.08 (26.8%)	0.00
Occurrence of a home health service	22.5%	15.0%	7.5pp (50.1%)	20.7%	14.3%	6.4pp (44.6%)	1.1pp
Number of 60-day home health spells	0.47	0.27	0.20 (76.4%)	0.41	0.25	0.16 (63.4%)	0.04
Occurrence of a cancer-related E&M service	92.6%	92.9%	-0.3pp (-0.3%)	92.5%	92.8%	-0.3pp (-0.4%)	0.0pp
Number of cancer-related E&M services	5.19	5.29	-0.10 (-2.0%)	4.96	5.12	-0.16 (-3.1%)	0.06
Occurrence of a Part B outpatient therapy service	9.7%	8.2%	1.5pp (18.0%)	10.1%	8.6%	1.5pp (17.8%)	0.0pp
Number of Part B outpatient therapy services	2.72	1.55	1.17 (75.1%)	2.58	1.55	1.03 (66.8%)	0.14
Occurrence of ICU admission	12.2%	10.0%	2.2pp (22.0%)	11.6%	9.0%	2.6pp (28.7%)	-0.4pp

Source: Medicare claims 2014-2021.
Notes: For readmission related outcomes, sample was restricted to those with at least one hospitalization. We did not conduct tests for the statistical significance of baseline differences for the claims-based measures of utilization and payment because of the large sample sizes. pp: Percentage point. ED: Emergency department. E&M: Evaluation and management. ICU: Intensive care unit. OCM intervention group. COMP: Comparison group.

Exhibit SE-7: Baseline Differences in End-of-Life Claims-Based Utilization Outcomes Using Reduced Risk Adjustment Model: Black Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM – Comp
	Black	White	Difference	Black	White	Difference	
Any chemotherapy in last 14 days of life	11.3%	11.9%	-0.6pp (-5.4%)	11.4%	11.7%	-0.4pp (-3.0%)	-0.3pp
Any hospitalization in last 30 days of life	59.8%	52.3%	7.4pp (14.2%)	57.7%	52.4%	5.3pp (10.0%)	2.2pp
ED use (2+ visits) in last 30 days of life	18.6%	14.6%	4.0pp (27.7%)	19.2%	15.0%	4.2pp (28.0%)	-0.2pp
Hospice stay 3 or more days prior to death	51.3%	60.4%	-9.1pp (-15.1%)	53.1%	58.5%	-5.4pp (-9.2%)	-3.7pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Note: pp: percentage point. ED: Emergency department. OCM: OCM intervention group. COMP: Comparison group.

Exhibit SE-8: Baseline Differences in End-of-Life Claims-Based Utilization Outcomes Using Reduced Risk Adjustment Model: Hispanic Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Hispanic	White	Difference	Hispanic	White	Difference	
Any chemotherapy in last 14 days of life	12.0%	11.9%	0.1pp (0.5%)	11.1%	11.7%	-0.6pp (-5.4%)	0.7pp
Any hospitalization in last 30 days of life	57.3%	52.3%	5.0pp (9.5%)	55.9%	52.4%	3.5pp (6.7%)	1.5pp
ED use (2+ visits) in last 30 days of life	19.0%	14.6%	4.5pp (30.6%)	16.8%	15.0%	1.8pp (11.7%)	2.7pp
Hospice stay 3 or more days prior to death	55.8%	60.4%	-4.6pp (-7.7%)	57.6%	58.5%	-0.9pp (-1.5%)	-3.8pp
No hospice care use	33.5%	30.4%	3.0pp (9.9%)	33.1%	32.5%	0.7pp (2.0%)	2.4pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: pp: percentage point. ED: Emergency department. OCM intervention group. COMP: Comparison group.

Exhibit SE-9: Baseline Differences in End-of-Life Claims-Based Utilization Outcomes Using Reduced Risk Adjustment Model: Dual-Eligible Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Dual	Non-Dual	Difference	Dual	Non-Dual	Difference	
Any chemotherapy in last 14 days of life	11.8%	11.9%	-0.1pp (-0.5%)	11.8%	11.7%	0.1pp (0.8%)	-0.2pp
Any hospitalization in last 30 days of life	55.2%	53.1%	2.2pp (4.1%)	55.3%	52.7%	2.6pp (4.9%)	-0.4pp
ED use (2+ visits) in last 30 days of life	17.8%	14.7%	3.1pp (21.1%)	19.3%	14.7%	4.6pp (31.5%)	-1.5pp
Hospice stay 3 or more days prior to death	54.8%	60.2%	-5.3pp (-8.9%)	52.3%	58.9%	-6.6pp (-11.2%)	1.3pp
No hospice care use	35.5%	30.7%	4.8pp (15.5%)	38.0%	32.1%	5.9pp (18.5%)	-1.2pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: ED: Emergency department. OCM intervention group. COMP: Comparison group.

Exhibit SE-10: Baseline Differences in Chemotherapy-Associated Acute Care Utilization Outcomes Using Reduced Risk Adjustment Model: Black Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Black	White	Difference	Black	White	Difference	
Chemotherapy-associated hospitalizations	14.6%	13.0%	1.5pp (11.9%)	13.7%	12.6%	1.1pp (8.8%)	0.4pp
Chemotherapy-associated ED visits resulting in a hospital admission	11.9%	10.3%	1.6pp (16.0%)	11.0%	9.6%	1.4pp (14.4%)	0.3pp
Chemotherapy-associated ED visits without a hospital admission	11.2%	8.1%	3.2pp (39.1%)	12.1%	8.4%	3.7pp (44.0%)	-0.5pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Note: pp: percentage point. ED: Emergency department. OCM: OCM intervention group. COMP: Comparison group.

Exhibit SE11: Baseline Differences in Chemotherapy-Associated Acute Care Utilization Outcomes Using Reduced Risk Adjustment Model: Hispanic Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Hispanic	White	Difference	Hispanic	White	Difference	
Chemotherapy-associated hospitalizations	14.4%	13.0%	1.4pp (10.9%)	13.5%	12.6%	0.9pp (7.1%)	0.5pp
Chemotherapy-associated ED visits resulting in a hospital admission	12.1%	10.3%	1.8pp (17.5%)	11.2%	9.6%	1.6pp (16.9%)	0.2pp
Chemotherapy-associated ED visits without a hospital admission	10.0%	8.1%	1.9pp (23.7%)	10.3%	8.4%	1.9pp (22.9%)	0.0pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: pp: percentage point. ED: Emergency department. OCM intervention group. COMP: Comparison group.

Exhibit SE-12: Baseline Differences in Chemotherapy-Associated Acute Care Utilization Outcomes Using Reduced Risk Adjustment Model: Dual-Eligible Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Dual	Non-Dual	Difference	Dual	Non-Dual	Difference	
Chemotherapy-associated hospitalizations	16.0%	12.7%	3.3pp (26.2%)	15.1%	12.3%	2.8pp (23.0%)	0.5pp
Chemotherapy-associated ED visits resulting in a hospital admission	13.1%	10.0%	3.1pp (31.0%)	12.0%	9.4%	2.7pp (28.3%)	0.5pp
Chemotherapy-associated ED visits without a hospital admission	12.5%	7.7%	4.8pp (62.8%)	12.9%	8.0%	4.8pp (60.4%)	0.0pp

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: pp: percentage point. ED: Emergency department. OCM intervention group. COMP: Comparison group.

Exhibit SE-13: Baseline Differences in Clinical Outcomes Using Reduced Risk Adjustment Model: Black Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Black	White	Difference	Black	White	Difference	
Treatment with recommended supportive care medications							
WBC growth factors[a]	88.0%	86.8%	1.2 pp (1.4%)	85.3%	86.5%	-1.2 pp (-1.4%)	2.4 pp
Antiemetics[b]	78.1%	79.5%	-1.4 pp (-1.8%)	66.9%	73.8%	-7.0 pp (-9.5%)	5.6 pp
Bone-modifying drugs[c]	65.5%	68.8%	-3.3 pp (-4.8%)	63.1%	65.6%	-2.5 pp (-3.8%)	-0.8 pp
Chemotherapy initiation within 60 days after surgery							
Breast cancer	68.9%	73.9%	-5.0 pp (-6.8%)	72.7%	75.2%	-2.5 pp (-3.3%)	-2.6 pp
Colorectal cancer	54.2%	61.1%	-6.9 pp (-11.3%)	56.6%	61.9%	-5.3 pp (-8.6%)	-1.6 pp
Adherence to high-priced oral cancer treatments							
Enzalutamide or abiraterone for prostate cancer	86.3%	89.6%	-3.4 pp (-3.7%)	88.1%	89.8%	-1.7% (-1.9%)	-1.7 pp
TKIs for CML	82.7%	88.5%	-5.8 pp (-6.6%)	87.1%	87.9%	-0.8% (-0.9%)	-5.1 pp
18-month restricted mean survival for patients initiating chemotherapy							
Lung cancer survival time	362.8	356.1	6.7 days (1.9%)	364.7	358.1	6.6 days (1.8%)	0.1 days

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading, respectively.
Source: Medicare claims 2014-2021.
Notes: [a] Includes breast cancer episodes where the chemotherapy regimen had a high risk of causing neutropenia; [b] includes episodes with chemotherapy regimens with high risk of causing nausea and vomiting; [c] includes chemotherapy regimens for patients with bone metastases. CML: chronic myeloid leukemia. TKI: tyrosine kinase inhibitor. WBC: white blood cell. pp: Percentage point. OCM: OCM intervention group. COMP: Comparison group.

Exhibit SE-14: Baseline Differences in Clinical Outcomes Using Reduced Risk Adjustment Model: Hispanic Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Hispanic	White	Difference	Hispanic	White	Difference	
Treatment with recommended supportive care medications							
WBC growth factors[a]	83.4%	86.8%	-3.5 pp (-4.0%)	82.2%	86.5%	-4.3 pp (-5.0%)	0.9 pp
Antiemetics[b]	74.4%	79.5%	-5.1 pp (-6.4%)	65.1%	73.8%	-8.8 pp (-11.9%)	3.7 pp
Bone-modifying drugs[c]	67.5%	68.8%	-1.3 pp (-1.9%)	64.2%	65.6%	-1.5 pp (-2.3%)	0.2 pp
Chemotherapy initiation within 60 days after surgery							
Breast cancer	67.7%	73.9%	-6.2 pp (-8.4%)	73.0%	75.2%	-2.1 pp (-2.8%)	-4.0 pp
Colorectal cancer	58.5%	61.1%	-2.6 pp (-4.3%)	59.3%	61.9%	-2.6 pp (-4.2%)	0.0 pp
Adherence to high-priced oral cancer treatments							
Enzalutamide or abiraterone for prostate cancer	86.4%	89.6%	-3.3 pp (-3.7%)	89.7%	89.8%	-0.1% (-0.1%)	-3.2 pp
TKIs for CML	85.2%	88.5%	-3.3 pp (-3.7%)	88.9%	87.9%	1.1% (1.3%)	-4.4 pp
18-month restricted mean survival for patients initiating chemotherapy							
Lung cancer survival time	371.7	356.1	15.6 days (4.4%)	359.5	358.1	1.4 days (0.4%)	14.1 days

Shading indicates statistically significant estimates at p≤0.01, p≤0.05, and p≤0.10, indicated by dark blue, medium blue, or light blue shading.
Source: Medicare claims 2014-2021.
Notes: [a] Includes breast cancer episodes where the chemotherapy regimen had a high risk of causing neutropenia; [b] includes episodes with chemotherapy regimens with high risk of causing nausea and vomiting; [c] includes chemotherapy regimens for patients with bone metastases. CML: chronic myeloid leukemia. TKI: tyrosine kinase inhibitor. WBC: white blood cell. pp: Percentage point. OCM: OCM intervention group. COMP: Comparison group.

Exhibit SE-15: Baseline differences in Clinical Outcomes Using Reduced Risk Adjustment Model: Dual-Eligible Patients

Outcome	OCM Baseline			Comparison Baseline			Baseline Difference OCM - Comp
	Dual	Non-Dual	Difference	Dual	Non-Dual	Difference	
Treatment with recommended supportive care medications							
WBC growth factors[a]	84.8%	87.2%	-2.4 pp (-2.8%)	81.9%	87.1%	-5.2 pp (-6.0%)	2.8 pp
Antiemetics[b]	76.2%	80.1%	-3.8 pp (-4.7%)	69.4%	73.9%	-4.4 pp (-6.0%)	0.6 pp
Bone-modifying drugs[c]	65.1%	69.0%	-3.9 pp (-5.7%)	62.8%	65.8%	-3.0 pp (-4.6%)	-1.0 pp
Chemotherapy initiation within 60 days after surgery							
Breast cancer	68.8%	73.8%	-5.0 pp (-6.8%)	70.8%	75.5%	-4.7 pp (-6.2%)	-0.3 pp
Colorectal cancer	55.4%	61.2%	-5.8 pp (-9.5%)	54.9%	62.6%	-7.7 pp (-12.3%)	1.9 pp
Adherence to high-priced oral cancer treatments							
Enzalutamide or abiraterone for prostate cancer	86.9%	89.4%	-2.5 pp (-2.8%)	90.7%	89.4%	1.3% (1.5%)	-3.8 pp
TKIs for CML	86.0%	88.3%	-2.2 pp (-2.5%)	89.0%	87.5%	1.5% (1.7%)	-3.7 pp
18-month restricted mean survival for patients initiating chemotherapy							
Lung cancer survival time	346.5	359.3	-12.8 days (-3.6%)	350.7	360.3	-9.6 days (-2.7%)	-3.2 days

Shading indicates statistically significant estimates at $p \leq 0.01$, $p \leq 0.05$, and $p \leq 0.10$, indicated by dark blue, medium blue, or light blue shading, respectively.
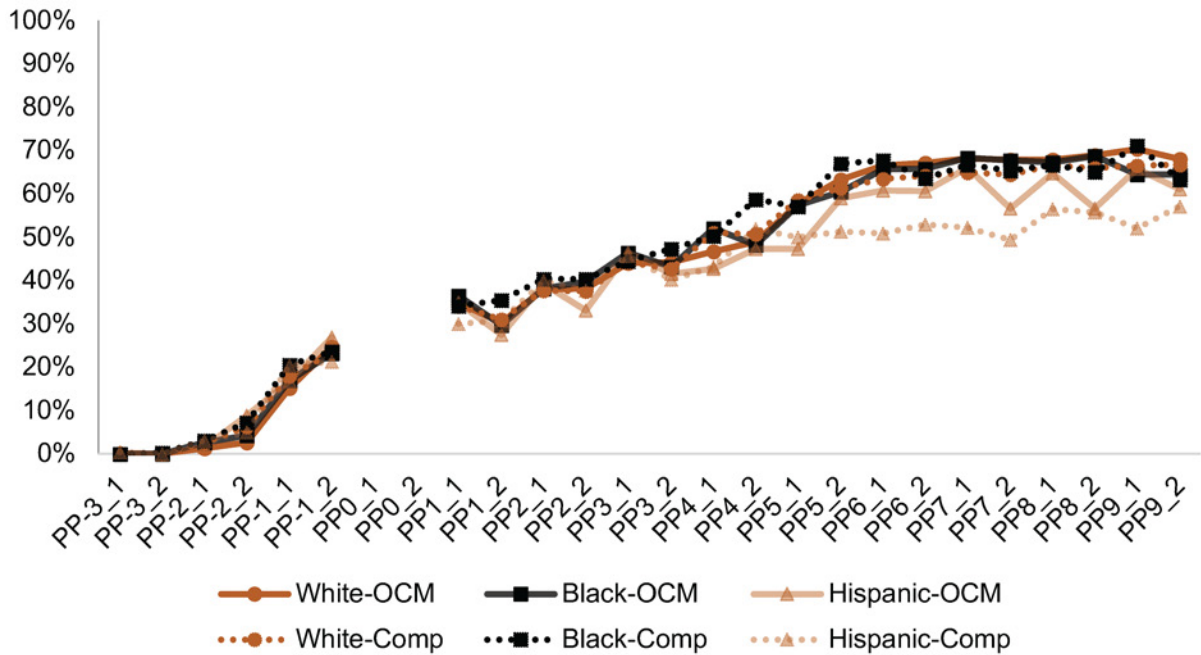
Source: Medicare claims 2014-2021.

Notes: [a] Includes breast cancer episodes where the chemotherapy regimen had a high risk of causing neutropenia; [b] includes episodes with chemotherapy regimens with high risk of causing nausea and vomiting; [c] includes chemotherapy regimens for patients with bone metastases. CML: chronic myeloid leukemia. TKI: tyrosine kinase inhibitor. WBC: white blood cell. pp: Percentage point. OCM: OCM intervention group. COMP: Comparison group.

SE.2 Trends in use of immunotherapy

We sought to understand if there were differential impacts by race and ethnicity or dual-eligible status in access to immunotherapy for lung cancer, an important therapy that has led to substantial improvement in survival for patients with advanced lung cancer.2 Immunotherapies were first approved for lung cancer in March 2015 (nivolumab) and October 2015 (pembrolizumab), during the baseline period for our evaluation (the baseline period began in July 2014 and included episodes that ended by December 2015).

During the period of steep increases in use during the last three of the six quarters of the baseline period, we found evidence for differential trends by important subgroups (Black, White, and dual-eligible patients). Therefore, we did not conduct DDD analyses. Nevertheless, we include two figures to demonstrate unadjusted trends in use of immunotherapy for lung cancer in different subgroups.

Exhibit SE-16. Trends in use of immunotherapy for lung cancer episodes for White, Black, and Hispanic patients for OCM and comparison episodes

Source: Medicare claims 2014–2021.

Exhibit SE-17. Trends in use of immunotherapy for lung cancer episodes for dual-eligible and Medicare-only patients for OCM and comparison episodes
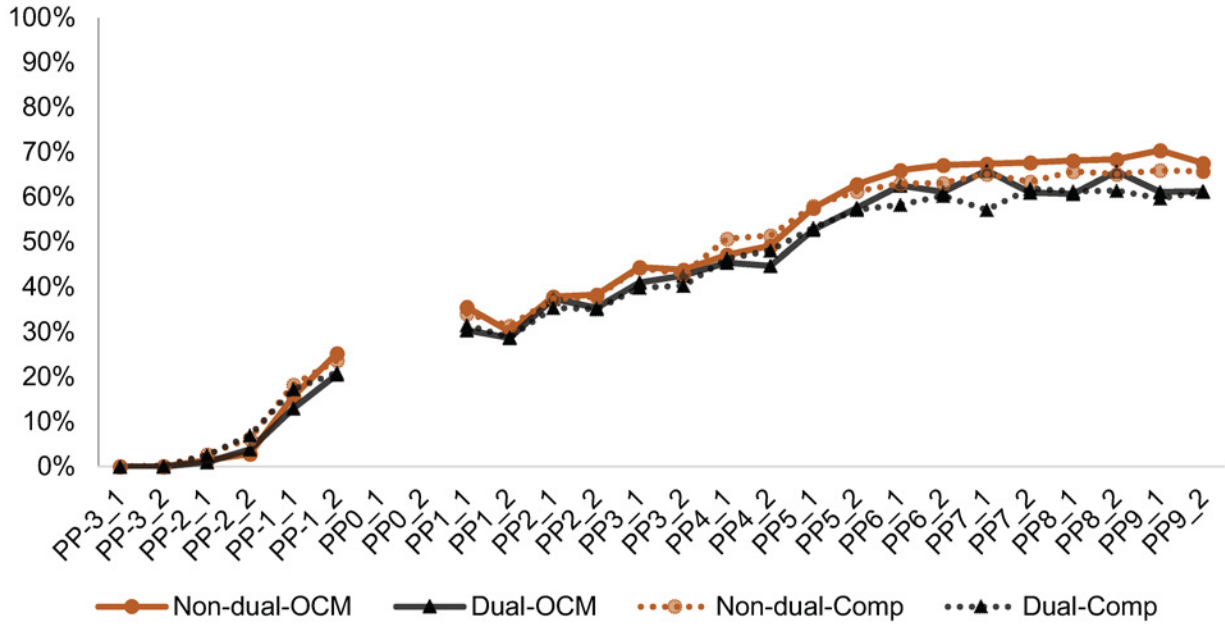
Source: Medicare claims 2014–2021.

Survey of Patients' Experiences with Cancer Care

Medicare records show that you were recently treated for cancer. This survey asks about your experiences with health care and cancer treatment during the past 6 months. Please think back over the past 6 months when filling out the survey.

If the person to whom this letter is addressed has passed away, we would be most grateful if a close family member or friend would fill out the survey on their behalf. Please answer as you think the person would have answered. It is important for us to learn about the experiences of all cancer patients.

Survey Instructions

Answer each question by marking the box to the left of your answer.

You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☐ Yes
☒ No →**If No, go to #1 on Page 3**

Please return this survey in the enclosed prepaid envelope to:

Abt SRBI
55 Wheeler Street
Cambridge, MA 02138

This survey is about the care related to the medicines you received to treat your cancer during the last 6 months. This medicine could be in the form of an infusion, an injection, or a pill. This medicine could be chemotherapy (including immunotherapy and other targeted therapies) or hormonal therapy. This survey is <u>not</u> about cancer surgery or about radiation treatment.

As you answer the survey, please think about the doctors and nurses and their support staff who were *most responsible for managing your care* related to your chemotherapy or hormonal therapy, during the last 6 months. Together, these persons are called your Cancer Therapy Team.

Understanding Cancer Therapy and Contacting the Team

1. Since your cancer was diagnosed, did a doctor or other member of your cancer therapy team talk with you about the reasons you might **want** to have chemotherapy or hormonal therapy?

   [1] ☐ Yes, definitely
   [2] ☐ Yes, somewhat
   [3] ☐ No

2. Since your cancer was diagnosed, did a doctor or other member of your cancer therapy team talk with you about the reasons you might **not want** to have chemotherapy or hormonal therapy?

   [1] ☐ Yes, definitely
   [2] ☐ Yes, somewhat
   [3] ☐ No

3. Did a doctor or other member of your cancer therapy team ask for your opinion about whether or not to have chemotherapy/hormonal therapy?

   [1] ☐ Yes, definitely
   [2] ☐ Yes, somewhat
   [3] ☐ No

4. Did a doctor or other member of your cancer therapy team involve you in decisions about your chemotherapy or hormonal therapy as much as you wanted?

   [1] ☐ Yes, definitely
   [2] ☐ Yes, somewhat
   [3] ☐ No

5. Did any of your doctors recommend that you not have chemotherapy or hormonal therapy for your cancer? These can be doctors who were part of your cancer therapy team or any other doctors, anywhere.

   [1] ☐ Yes
   [2] ☐ No

6. Since it was decided that you would have chemotherapy or hormonal therapy to treat your cancer, did your cancer therapy team clearly explain how this treatment could affect your normal daily activities?

   [1] ☐ Yes, definitely
   [2] ☐ Yes, somewhat
   [3] ☐ No

The next items ask what you thought about the possible results and side effects of chemotherapy or hormonal therapy to treat your cancer, after talking with your cancer therapy team. If you have not thought about or discussed the issue, just answer that you do not know.

7. After talking with your cancer therapy team, how likely did you think it was that chemotherapy or hormonal therapy would help you live longer?

   1 ☐ Very likely
   2 ☐ Somewhat likely
   3 ☐ A little likely
   4 ☐ Not at all likely

   5 ☐ Don't Know

8. After talking with your cancer therapy team, how likely did you think it was that chemotherapy or hormonal therapy would cure your cancer?

   1 ☐ Very likely
   2 ☐ Somewhat likely
   3 ☐ A little likely
   4 ☐ Not at all likely

   5 ☐ Don't Know

9. After talking with your cancer therapy team, how likely did you think it was that chemotherapy or hormonal therapy would help improve symptoms you were having because of your cancer?

   1 ☐ Very likely
   2 ☐ Somewhat likely
   3 ☐ A little likely
   4 ☐ Not at all likely

   5 ☐ Not applicable, no cancer symptoms
   6 ☐ Don't Know

10. After talking with your cancer therapy team, how likely did you think it was that chemotherapy or hormonal therapy would have side-effects or complications?

    1 ☐ Very likely
    2 ☐ Somewhat likely
    3 ☐ A little likely
    4 ☐ Not at all likely

    5 ☐ Don't Know

11. After it was decided that you would have chemotherapy or hormonal therapy, did your cancer therapy team encourage you to contact them with questions between visits?

    1 ☐ Yes, definitely
    2 ☐ Yes, somewhat
    3 ☐ No

12. Did your cancer therapy team tell you to call them immediately if you have certain symptoms or side effects?

    1 ☐ Yes, definitely
    2 ☐ Yes, somewhat
    3 ☐ No

13. Did your cancer therapy team give you clear instructions about how to contact them outside of regular office hours?

    1 ☐ Yes, definitely
    2 ☐ Yes, somewhat
    3 ☐ No

14. Did you ever try to contact your cancer therapy team after hours?

$^1\square$ Yes
$^2\square$ No →**If No, go to #16**

15. When you tried to contact your cancer therapy team after hours, were you able to speak with a member of the team, or a clinician "on call" for your cancer therapy team?

$^1\square$ Yes
$^2\square$ No

16. In the last 6 months, how often did your cancer therapy team show respect for what you had to say?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

17. In the last 6 months, how often did your cancer therapy team listen carefully to you?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

18. In the last 6 months, how often was your cancer therapy team direct and straightforward when talking with you about your cancer and chemotherapy or hormonal therapy?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

19. In the last 6 months, did you talk with your cancer therapy team about any health questions or concerns related to your cancer treatment?

$^1\square$ Yes
$^2\square$ No →**If No, go to #21**

20. In the last 6 months, how often did your cancer therapy team give you easy-to-understand information about these health questions or concerns?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

21. In the last 6 months, how often did your cancer therapy team seem to know the important information about your medical history?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

22. In the last 6 months, how often did your cancer therapy team explain things in a way you could understand?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

23. In the last 6 months, how often did your cancer therapy team spend enough time with you?

$^1\square$ Never
$^2\square$ Sometimes
$^3\square$ Usually
$^4\square$ Always

24. In the last 6 months, did your cancer therapy team delay your cancer treatment or a decision about your cancer treatment because they were missing test results or reports from other health professionals?

^{1}□ Yes, definitely

^{2}□ Yes, somewhat

^{3}□ No

25. In the last 6 months, did you get conflicting information about your care from different members of your cancer therapy team?

^{1}□ Yes, definitely

^{2}□ Yes, somewhat

^{3}□ No

26. In the last 6 months, did your cancer therapy team tell you what the next steps in your chemotherapy or hormonal therapy would be?

^{1}□ Yes, definitely

^{2}□ Yes, somewhat

^{3}□ No

Appointments, Tests, Procedures, and Services

27. In the last 6 months, how many times did you visit your cancer therapy team's office in person for an appointment? Do **not** include telephone calls, emails, or overnight hospital stays.

^{1}□ 0 times→ **If 0 times, go to #29**

^{2}□ 1 to 5 times

^{3}□ 6 to 10 times

^{4}□ 11 or more times

28. How often were these office visits scheduled at times that were convenient for you?

^{1}□ Never

^{2}□ Sometimes

^{3}□ Usually

^{4}□ Always

29. In the last 6 months, did you have blood tests, x-rays, scans, or other procedures as part of your cancer treatment? Do **not** include chemotherapy or hormonal therapy.

^{1}□ Yes

^{2}□ No →**If No, go to #31**

30. How often were the blood tests, x-rays, scans, or other procedures done as soon as you or your doctor thought you needed?

^{1}□ Never

^{2}□ Sometimes

^{3}□ Usually

^{4}□ Always

31. In the last 6 months, how often did you have to wait longer for your test results than you expected?

^{1}□ Never

^{2}□ Sometimes

^{3}□ Usually

^{4}□ Always

32. In the last 6 months, how often did your cancer therapy team explain test results in a way that was easy to understand?

^{1}□ Never

^{2}□ Sometimes

^{3}□ Usually

^{4}□ Always

33. In the last 6 months, did your cancer therapy team prescribe medicine (other than chemotherapy or hormonal therapy) that you had not taken before?

    ¹ ☐ Yes

    ² ☐ No **→If No, go to #35**

34. In the last 6 months, did your cancer therapy team explain what that medicine was for in a way that was easy to understand?

    ¹ ☐ Yes, definitely

    ² ☐ Yes, somewhat

    ³ ☐ No

Managing Symptoms

35. In the last 6 months, did you and your cancer therapy team talk about pain related to your cancer or your chemotherapy or hormonal therapy?

    ¹ ☐ Yes

    ² ☐ No

36. In the last 6 months, how much were you bothered by pain from your cancer or from your chemotherapy or hormonal therapy?

    ¹ ☐ Not at all **→If Not at all, go to #38**

    ² ☐ A little

    ³ ☐ Quite a bit

    ⁴ ☐ Very much

37. In the last 6 months, did your cancer therapy team try to help you deal with this pain?

    ¹ ☐ Yes, definitely

    ² ☐ Yes, somewhat

    ³ ☐ No

38. In the last 6 months, did you and your cancer therapy team talk about any changes in your energy levels related to your cancer or your chemotherapy or hormonal therapy?

    ¹ ☐ Yes

    ² ☐ No

39. In the last 6 months, how much were you bothered by changes in your energy level related to your cancer or your chemotherapy or hormonal therapy?

    ¹ ☐ Not at all **→If Not at all, go to #41**

    ² ☐ A little

    ³ ☐ Quite a bit

    ⁴ ☐ Very much

40. In the last 6 months, did your cancer therapy team try to help you deal with these changes in your energy levels?

    ¹ ☐ Yes, definitely

    ² ☐ Yes, somewhat

    ³ ☐ No

41. In the last 6 months, did you and your cancer therapy team talk about any emotional problems, such as anxiety or depression, related to your cancer or your chemotherapy or hormonal therapy?

    ¹ ☐ Yes

    ² ☐ No

42. In the last 6 months, how much were you bothered by any emotional problems, such as anxiety or depression, related to your cancer or chemotherapy or hormonal therapy?

    ^{1}☐ Not at all →**If Not at all, go to #44**

    ^{2}☐ A little

    ^{3}☐ Quite a bit

    ^{4}☐ Very much

43. In the last 6 months, did your cancer therapy team try to help you deal with these emotional problems?

    ^{1}☐ Yes, definitely

    ^{2}☐ Yes, somewhat

    ^{3}☐ No

44. In the last 6 months, how much were you bothered by nausea or vomiting related to your cancer or your chemotherapy or hormonal therapy?

    ^{1}☐ Not at all →**If Not at all, go to #46**

    ^{2}☐ A little

    ^{3}☐ Quite a bit

    ^{4}☐ Very much

45. In the last 6 months, did your cancer therapy team try to help you deal with this nausea/vomiting?

    ^{1}☐ Yes, definitely

    ^{2}☐ Yes, somewhat

    ^{3}☐ No

46. In the last 6 months, how much were you bothered by difficulty breathing related to your cancer or your chemotherapy or hormonal therapy?

    ^{1}☐ Not at all →**If Not at all, go to #48**

    ^{2}☐ A little

    ^{3}☐ Quite a bit

    ^{4}☐ Very much

47. In the last 6 months, did your cancer therapy team try to help you deal with this difficulty breathing?

    ^{1}☐ Yes, definitely

    ^{2}☐ Yes, somewhat

    ^{3}☐ No

48. In the last 6 months, how much were you bothered by coughing related to your cancer or your chemotherapy or hormonal therapy?

    ^{1}☐ Not at all →**If Not at all, go to #50**

    ^{2}☐ A little

    ^{3}☐ Quite a bit

    ^{4}☐ Very much

49. In the last 6 months, did your cancer therapy team try to help you deal with this cough?

    ^{1}☐ Yes, definitely

    ^{2}☐ Yes, somewhat

    ^{3}☐ No

50. In the last 6 months, how much were you bothered by constipation or diarrhea related to your cancer or your chemotherapy or hormonal therapy?

     1☐ Not at all →**If Not at all, go to #52**
     2☐ A little
     3☐ Quite a bit
     4☐ Very much

51. In the last 6 months, did your cancer therapy team try to help you deal with this constipation or diarrhea?

     1☐ Yes, definitely
     2☐ Yes, somewhat
     3☐ No

52. In the last 6 months, how much were you bothered by neuropathy (pain or tingling in your feet or hands) related to your chemotherapy or hormonal therapy?

     1☐ Not at all →**If Not at all, go to #54**
     2☐ A little
     3☐ Quite a bit
     4☐ Very much

53. In the last 6 months, did your cancer therapy team try to help you deal with this neuropathy?

     1☐ Yes, definitely
     2☐ Yes, somewhat
     3☐ No

Additional Services

54. In the last 6 months, did you and your cancer therapy team talk about additional services to manage your cancer care at home, such as home health care, special medical equipment, or special supplies?

     1☐ Yes, definitely
     2☐ Yes, somewhat
     3☐ No

55. In the last 6 months, did you need additional services to manage your cancer care at home, such as home health care, special medical equipment, or special supplies?

     1☐ Yes
     2☐ No →**If No, go to #58**

56. Did you need help arranging for these additional services?

     1☐ Yes
     2☐ No →**If No, go to #58**

57. Did your cancer therapy team help arrange for these additional services?

     1☐ Yes
     2☐ No

58. In the last 6 months, did you and your cancer therapy team talk about things you can do to maintain your health during cancer treatment, such as what to eat and what exercises to do?

     1☐ Yes, definitely
     2☐ Yes, somewhat
     3☐ No

Family and Caregivers

59. In the last 6 months, were any family members or **close** friends present during discussions with your cancer therapy team about your cancer or cancer care?

  $^1\square$ Yes
  $^2\square$ No →**If No, go to #61**

60. In the last 6 months, did your cancer therapy team involve your family members or **close** friends in discussions as much as you wanted?

  $^1\square$ Yes, definitely
  $^2\square$ Yes, somewhat
  $^3\square$ No

Language Interpreter Services

An interpreter is a person who repeats what someone says in a language used by another person; for example Spanish, Russian, Chinese, or American Sign Language.

61. In the last 6 months, did you want an interpreter to help you speak with your cancer therapy team?

  $^1\square$ Yes
  $^2\square$ No →**If No, go to #63**

62. In the last 6 months, how often did your cancer therapy team provide an interpreter?

  $^1\square$ Never
  $^2\square$ Sometimes
  $^3\square$ Usually
  $^4\square$ Always

Overall Rating

63. Using any number from 0 to 10, where 0 is the worst cancer therapy team possible and 10 is the best cancer therapy team possible, what number would you use to rate your cancer therapy team over the last 6 months?

  $\square$ 0 Worst Cancer Therapy Team Possible
  $\square$ 1
  $\square$ 2
  $\square$ 3
  $\square$ 4
  $\square$ 5
  $\square$ 6
  $\square$ 7
  $\square$ 8
  $\square$ 9
  $\square$ 10 Best Cancer Therapy Team Possible

Health Status

The next questions are about your health state *today*. [If you are filling out this survey on behalf of someone who has passed away, please skip this section and go to #76.]

64. In general, how would you rate your overall health today?

  $^1\square$ Excellent
  $^2\square$ Very good
  $^3\square$ Good
  $^4\square$ Fair
  $^5\square$ Poor

65. In general, how would you rate your overall **mental or emotional** health today?

¹ ☐ Excellent
² ☐ Very good
³ ☐ Good
⁴ ☐ Fair
⁵ ☐ Poor

66. Would you say you have no problems in walking about, some problems in walking about, or you are confined to bed?

¹ ☐ No problems walking about
² ☐ Some problems walking about
³ ☐ You are confined to bed

67. Would you say you have no problems with self-care, some problems washing or dressing yourself, or you are unable to wash or dress yourself?

¹ ☐ No problems with self-care
² ☐ Some problems washing or dressing yourself
³ ☐ You are unable to wash or dress yourself

68. Would you say you have no problems performing your usual activities, some problems performing your usual activities, or you are unable to perform your usual activities? Please consider work, study, housework, family, or leisure activities.

¹ ☐ No problems performing your usual activities
² ☐ Some problems performing your usual activities
³ ☐ You are unable to perform your usual activities

69. Would you say you have no pain or discomfort, moderate pain or discomfort or extreme pain or discomfort?

¹ ☐ No pain or discomfort
² ☐ Moderate pain or discomfort
³ ☐ Extreme pain or discomfort

70. Would you say that you are not anxious or depressed, moderately anxious or depressed, or extremely anxious or depressed?

¹ ☐ Not anxious or depressed
² ☐ Moderately anxious or depressed
³ ☐ Extremely anxious or depressed

71. We would like to know how good or bad your health is TODAY. This scale is numbered from 0 to 100. 100 means the best health you can imagine. 0 means the worst health you can imagine. Mark an X on the scale to indicate how your health is TODAY.

The best health you
can imagine

```
--------    100
--           95
--------     90
--           85
--------     80
--           75
--------     70
--           65
--------     60
--           55
--------     50
--           45
--------     40
--           35
--------     30
--           25
--------     20
--           15
--------     10
--            5
--------      0
```

The worst health you
can imagine
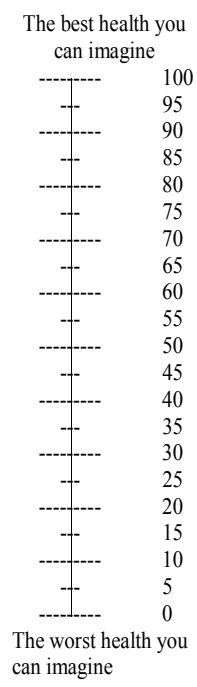
Now, please write the number you marked on the scale in the box below.

YOUR HEALTH TODAY = ☐☐☐

72. How do you prefer to make decisions about your cancer treatment?

1 ☐ **You** prefer to mainly make the decisions

2 ☐ You prefer for **you and your doctor** to make the decisions together

3 ☐ You prefer for **your doctor** to mainly make the decisions

73. Are you still receiving chemotherapy or hormonal therapy today?

1 ☐ Yes

2 ☐ No

Patients, whether healthy or sick, may talk with their Cancer Therapy Team about their goals and wishes if someday they become very sick or close to dying.

74. Have you **ever** talked with a doctor or other member of your cancer therapy team about your wishes, if you become very ill or close to dying?

1 ☐ Yes

2 ☐ No

75. If you had to make a choice today, would you prefer treatment that extends your life as much as possible, even if it means having more pain and discomfort, or would you want treatment that focuses on relieving pain and discomfort as much as possible, even if it means not living as long?

1 ☐ Extend life as much as possible

2 ☐ Relieve pain or discomfort as much as possible

3 ☐ Don't Know

About You

The following questions are about you (the cancer patient).

76. What is your age?

1 ☐ 18 to 44

2 ☐ 45-64

3 ☐ 65-74

4 ☐ 75-84

5 ☐ 85 or older

77. Are you male or female?

1 ☐ Male

2 ☐ Female

78. What is the highest grade or level of school that you completed?

1 ☐ 8th grade or less

2 ☐ Some high school, but did not graduate

3 ☐ High school graduate or GED

4 ☐ Some college or 2-year degree

5 ☐ 4-year college graduate

6 ☐ More than 4-year college degree

79. Are you of Hispanic or Latino origin or descent?

^{1}□ Yes, Hispanic or Latino

^{2}□ No, not Hispanic or Latino

80. What is your race? Please mark one or more.

^{1}□ White

^{2}□ Black or African American

^{3}□ Asian

^{4}□ Native Hawaiian or Other Pacific Islander

^{5}□ American Indian or Alaska Native

^{6}□ Other

81. In addition to Medicare, do you have any supplemental insurance that helps cover the cost of copayments, coinsurance, and deductibles?

^{1}□ Yes

^{2}□ No

^{3}□ Don't know

82. Thinking about everything you paid for <u>with your own money</u> in the past year for care related to your cancer or medications to treat it, that was not covered by insurance, how much did you spend?

^{1}□ Less than $100

^{2}□ $100-$499

^{3}□ $500-$999

^{4}□ $1000-$1999

^{5}□ $2000-$4999

^{6}□ $5000 or more

^{98}□ I don't know

83. Who is answering this survey?

^{1}□ Me, the person it was addressed to, by myself

^{2}□ Me, with help from someone else

^{3}□ Someone else answered the questions for me

^{4}□ Someone else completed this survey on behalf of a person who has passed away

Thank you for completing this survey. Please return it in the postage-paid envelope.